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HARVARD UNIVERSITY



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GRADUATE SCHOOL
OF EDUCATION**

NATIONAL EDUCATIONAL ASSOCIATION

JOURNAL
OF
PROCEEDINGS AND ADDRESSES
OF THE
FORTIETH ANNUAL MEETING
HELD AT
DETROIT, MICHIGAN
JULY 8-12, 1901

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CONSTITUTION OF THE NATIONAL EDUCATIONAL ASSOCIATION

PREAMBLE

To elevate the character and advance the interests of the profession of teaching, and to promote the cause of popular education in the United States, we, whose names are subjoined, agree to adopt the following

CONSTITUTION

ARTICLE I—NAME

This association shall be styled the NATIONAL EDUCATIONAL ASSOCIATION.

ARTICLE II—DEPARTMENTS

SECTION 1. It shall consist of eighteen departments: first, of Superintendence; second, of Normal Schools; third, of Elementary Education; fourth, of Higher Education; fifth, of Manual Training; sixth, of Art Education; seventh, of Kindergarten Education; eighth, of Music Education; ninth, of Secondary Education; tenth, of Business Education; eleventh, of Child Study; twelfth, of Physical Education; thirteenth, of Natural Science Instruction; fourteenth, of School Administration; fifteenth, the Library Department; sixteenth, for the Education of the Deaf, Blind, and Feeble-Minded; seventeenth, of Indian Education; and eighteenth, the National Council of Education.

SEC. 2. Other departments may be organized in the manner prescribed in this constitution.

ARTICLE III—MEMBERSHIP

SECTION 1. There shall be three classes of members, namely, active, associate, and corresponding.

SEC. 2. Teachers and all who are actively associated with the management of educational institutions, including libraries and periodicals, may become active members. All others who pay an annual membership fee of two dollars may become associate members.

Eminent educators not residing in America may be elected by the Directory to be corresponding members. The number of corresponding members shall at no time exceed fifty.

SEC. 3. Any person eligible may become an active member upon application indorsed by two active members, and the payment of an enrollment fee of two dollars and the annual dues for the current year.

Active members only have the right to vote and to hold office in the general association or in the several departments.

All active members must pay annual dues of two dollars, and will be entitled to the volume of proceedings without "coupon" or other conditions. The annual membership

fee shall be payable at the time of the annual convention, or by remittance to the Secretary before September 1 of each year. Any active member may discontinue membership by giving written notice to the Secretary before September 1, and may restore the same only on payment of the enrollment fee of two dollars and the annual dues for the current year.

All life members and life directors shall be denominated active members, and shall enjoy all the powers and privileges of such members without the payment of annual dues.

Associate members may receive the volume of proceedings in accordance with the usual "coupon" conditions, as printed on the membership certificate.

Corresponding members will be entitled to the volume of proceedings without the payment of fees or other conditions.

SEC. 4. The names of active and corresponding members only will be printed in the volume of proceedings, with their respective educational titles, offices, and addresses, the list to be revised annually by the Secretary of the association.

ARTICLE IV—OFFICERS

SECTION 1. The officers of this association shall consist of a President, twelve Vice-Presidents, a Secretary, a Treasurer, a Board of Directors, a Board of Trustees, and an Executive Committee, as hereinafter provided.

SEC. 2. The Board of Directors shall consist of the President of the National Educational Association, First Vice-President, Secretary, Treasurer, chairman of the Board of Trustees, and one additional member from each state, territory, or district, to be elected by the association for the term of one year, or until their successors are chosen, and of all life directors elected previous to July 10, 1895.

All past presidents of the association now living (July 10, 1895), and all future presidents at the close of their respective terms of office, and the United States Commissioner of Education shall be life directors of the association.

The President of the National Educational Association, First Vice-President, Treasurer, chairman of the Board of Trustees, and a member of the association to be chosen annually by the Board of Directors, which member shall hold office for one year, shall constitute the Executive Committee.

SEC. 3. The elective officers of the association, with the exception of the Secretary, shall be chosen by the active members of the association by ballot, unless otherwise ordered, on the third day of each annual session, a majority of the votes cast being necessary for a choice. They shall continue in office until the close of the annual session subsequent to their election, and until their successors are chosen, except as hereinafter provided.

SEC. 4. Each department shall be administered by a president, vice-president, secretary, and such other officers as it shall deem necessary to conduct its affairs; but no person shall be elected to any office of the association, or of any department, who is not, at the time of the election, an active member of the association.

SEC. 5. The President shall preside at all meetings of the association and of the Board of Directors, and shall perform the duties usually devolving upon a presiding officer. In his absence, the first vice-president in order, who is present, shall preside; and in the absence of all vice-presidents, a *pro-tempore* chairman shall be appointed on nomination, the Secretary putting the question.

SEC. 6. The Secretary shall keep a full and accurate report of the proceedings of the general meetings of the association and all meetings of the Board of Directors, and shall conduct such correspondence as the directors may assign, and shall have his records present at all meetings of the association and of the Board of Directors. The secretary of each department shall, in addition to performing the duties usually pertaining to his office, keep a list of the members of his department.

SEC. 7. The Treasurer shall receive, and under the direction of the Board of Trustees hold in safe-keeping, all moneys paid to the association; shall expend the same only upon the order of said board; shall keep an exact account of his receipts and expenditures, with vouchers for the latter, which accounts, ending the 1st day of July each year, he shall render to the Board of Trustees, and, when approved by said board, he shall report the same to the Board of Directors. The Treasurer shall give such bond for the faithful discharge of his duties as may be required by the Board of Trustees; and he shall continue in office until the first meeting of the Board of Directors held prior to the annual meeting of the association next succeeding that for which he is elected.

SEC. 8. The Board of Directors shall have power to fill all vacancies in their own body; shall have in charge the general interests of the association, excepting those herein intrusted to the Board of Trustees; shall make all necessary arrangements for its meetings, and shall do all in its power to make it a useful and honorable institution. Upon the written application of twenty active members of the association for permission to establish a new department, it may grant such permission. Such new department shall in all respects be entitled to the same rights and privileges as the others. The formation of such department shall in effect be a sufficient amendment to this constitution for the insertion of its name in Art. II, and the Secretary shall make the necessary alterations.

SEC. 9. The Board of Trustees shall consist of four members, elected by the Board of Directors for the term of four years, and the President of the association, who shall be a member *ex officio* during his term of office. At the election of the trustees in 1886, one trustee shall be elected for one year, one for two years, one for three years, and one for four years; and annually thereafter, at the first meeting of the Board of Directors held prior to the annual meeting of the association, one trustee shall be elected for the term of four years. All vacancies occurring in said Board of Trustees, whether by resignation or otherwise, shall be filled by the Board of Directors for the unexpired term; and the absence of a trustee from two successive annual meetings of the board shall forfeit his membership therein. The Board of Trustees thus elected shall constitute the body corporate of the association, as provided in the certificate of incorporation under the provisions of the Act of General Incorporation, Class Third, of the Revised Statutes of the District of Columbia, dated the 24th day of February, 1886, at Washington, D. C., and recorded in Liber No. 4, "Acts of Incorporation for the District of Columbia."

SEC. 10. It shall be the duty of the Board of Trustees to provide for safe-keeping and investment of all funds which the association may receive from donations; and the income of such invested funds shall be used exclusively in paying the cost of publishing the annual volume of proceedings of the association, excepting when donors shall specify otherwise. It shall also be the duty of the board to issue orders on the Treasurer for the payment of all bills approved by the Board of Directors, or by the President and Secretary of the association acting under the authority of the Board of Directors; and, when practicable, the trustees shall invest all surplus funds exceeding one hundred dollars that shall remain in the hands of the Treasurer after paying the expenses of the association for the previous year.

SEC. 11. The Board of Trustees shall elect the Secretary of the association, who shall also be secretary of the Executive Committee, and shall fix the compensation and the term of office for a period not to exceed four years.

ARTICLE V—MEETINGS

SECTION 1. The annual meeting of the association shall be held at such time and place as shall be determined by the Board of Directors.

SEC. 2. Special meetings may be called by the President at the request of five directors.

SEC. 3. Any department of the association may hold a special meeting at such time and place as by its own regulations it shall appoint.

SEC. 4. The Board of Directors shall hold its regular meetings at the place and not less than two hours before the assembling of the association.

SEC. 5. Special meetings may be held at such other times and places as the board or the President shall determine.

SEC. 6. Each new board shall organize at the session of its election. At its first meeting a committee on publication shall be appointed, which shall consist of the President and the Secretary of the association for the previous year, and one member from each department.

ARTICLE VI—BY-LAWS

By-laws not inconsistent with this constitution may be adopted by a two-thirds vote of the association.

ARTICLE VII—AMENDMENTS

This constitution may be altered or amended at a regular meeting by the unanimous vote of the members present; or by a two-thirds vote of the members present, provided that the alteration or amendment has been substantially proposed in writing at a previous meeting.

BY-LAWS

1. At the first session of each annual meeting of the association there shall be appointed by the President a committee on resolutions; and at the third session of such meeting there shall be appointed a committee on nominations, consisting of one member from each state and territory represented, the same to be appointed by the President on the nomination of a majority of the active members in attendance from such state or territory; provided, however, that such appointment shall be made by the President without such nomination, when less than three active members from a state or territory are in attendance, and also when a majority of the active members in attendance from any state or territory shall fail to make a nomination.

The meetings of active members to nominate members of the nominating committee shall be held at 5:30 P. M. on the first day of the annual meeting of the association, at such places as shall be announced in the general program.

2. The President and Secretary shall certify to the Board of Trustees all bills approved by the Board of Directors.

3. Each paying member of the association shall be entitled to a copy of its proceedings.

4. No paper, lecture, or address shall be read before the association or any of its departments in the absence of its author, nor shall any such paper, lecture, or address be published in the volume of proceedings, without the consent of the association, upon approval of the Executive Committee.

5. It shall be the duty of the President, Secretary, and Treasurer of the association to appoint annually some competent person to examine the securities of the Permanent Fund held by the Board of Trustees, and his certificate, showing the condition of the said fund, shall be attached to the report of the Board of Trustees.

ACT OF INCORPORATION

At a meeting of the Board of Directors of the National Educational Association, held at Saratoga Springs, N. Y., July 14, 1885, the following resolution was passed:

Resolved, That a committee of three be appointed to secure articles of incorporation for the National Educational Association, under United States or state laws, as speedily as may be.

N. A. Calkins, of New York; Thomas W. Bicknell, of Massachusetts; and Eli T. Tappan, of Ohio, were appointed such committee.

Under the authority of the resolution quoted above, and with the approval of the committee, and by competent legal advice, the chairman obtained a

CERTIFICATE OF INCORPORATION

We, the undersigned, Norman A. Calkins, John Eaton, and Zalmon Richards, citizens of the United States, and two of them citizens of the District of Columbia, do hereby associate ourselves together, pursuant to the provisions of the Act of General Incorporation, Class Third, of the Revised Statutes of the District of Columbia, under the name of the "National Educational Association," for the full period of twenty years, the purpose and objects of which are to elevate the character and advance the interests of the profession of teaching and to promote the cause of popular education in the United States. . . . To secure the full benefit of said act we do here execute this our certificate of incorporation as said act provides.

In witness whereof, we severally set our hands and seals this 24th day of February, 1886, at Washington, D. C.

NORMAN A. CALKINS. [L. S.]

JOHN EATON. [L. S.]

ZALMON RICHARDS. [L. S.]

Duly acknowledged before Michael P. Callan, Notary Public in and for the District of Columbia, and recorded in Liber No. 4, Acts of Incorporation for the District of Columbia.

CALENDAR OF MEETINGS

NATIONAL TEACHERS' ASSOCIATION

- 1857.—PHILADELPHIA, PA. (Organized.)
JAMES L. ENOS, Chairman.
W. E. SHELDON, Secretary.
- 1858.—CINCINNATI, O.
Z. RICHARDS, President.
J. W. BULKLEY, Secretary.
A. J. RICKOFF, Treasurer.
- 1859.—WASHINGTON, D. C.
A. J. RICKOFF, President.
J. W. BULKLEY, Secretary.
C. S. PENNELL, Treasurer.
- 1860.—BUFFALO, N. Y.
J. W. BULKLEY, President.
Z. RICHARDS, Secretary.
O. C. WIGHT, Treasurer.
- 1861, 1862.—No session.
- 1863.—CHICAGO, ILL.
JOHN D. PHILBRICK, President.
JAMES CRUIKSHANK, Secretary.
O. C. WIGHT, Treasurer.
- 1864.—OGDENSBURG, N. Y.
W. H. WELLS, President.
DAVID N. CAMP, Secretary.
Z. RICHARDS, Treasurer.
- 1865.—HARRISBURG, PA.
S. S. GREENE, President.
W. E. SHELDON, Secretary.
Z. RICHARDS, Treasurer.
- 1866.—INDIANAPOLIS, IND.
J. P. WICKERSHAM, President.
S. H. WHITE, Secretary.
S. P. BATES, Treasurer.
- 1867.—No session.
- 1868.—NASHVILLE, TENN.
J. M. GREGORY, President.
L. VAN BOKKELEN, Secretary.
JAMES CRUIKSHANK, Treasurer.
- 1869.—TRENTON, N. J.
L. VAN BOKKELEN, President.
W. E. CROSBY, Secretary.
A. L. BARBER, Treasurer.
- 1870.—CLEVELAND, O.
DANIEL B. HAGAR, President.
A. P. MARBLE, Secretary.
W. E. CROSBY, Treasurer.

NAME CHANGED TO

NATIONAL EDUCATIONAL ASSOCIATION

- 1871.—ST. LOUIS, MO.
J. L. PICKARD, President.
W. E. CROSBY, Secretary.
JOHN HANCOCK, Treasurer.
- 1872.—BOSTON, MASS.
E. E. WHITE, President.
S. H. WHITE, Secretary.
JOHN HANCOCK, Treasurer.
- 1873.—ELMIRA, N. Y.
B. G. NORTHROP, President.
S. H. WHITE, Secretary.
JOHN HANCOCK, Treasurer.
- 1874.—DETROIT, MICH.
S. H. WHITE, President.
A. P. MARBLE, Secretary.
JOHN HANCOCK, Treasurer.
- 1875.—MINNEAPOLIS, MINN.
W. T. HARRIS, President.
W. R. ABBOTT, Secretary.
A. P. MARBLE, Treasurer.
- 1876.—BALTIMORE, MD.
W. F. PHELPS, President.
W. D. HENKLE, Secretary.
A. P. MARBLE, Treasurer.
- 1877.—LOUISVILLE, KY.
M. A. NEWELL, President.
W. D. HENKLE, Secretary.
J. ORMOND WILSON, Treasurer.
- 1878.—No session.
- 1879.—PHILADELPHIA, PA.
JOHN HANCOCK, President.
W. D. HENKLE, Secretary.
J. ORMOND WILSON, Treasurer.
- 1880.—CHAUTAUQUA, N. Y.
J. ORMOND WILSON, President.
W. D. HENKLE, Secretary.
E. T. TAPPAN, Treasurer.

- 1881.—ATLANTA, GA.
JAMES H. SMART, President.
W. D. HENKLE, Secretary.
E. T. TAPPAN, Treasurer.
- 1882.—SARATOGA SPRINGS, N. Y.
G. J. ORR, President.
W. E. SHELTON, Secretary.
H. S. TARBELL, Treasurer.
- 1883.—SARATOGA SPRINGS, N. Y.
E. T. TAPPAN, President.
W. E. SHELTON, Secretary.
N. A. CALKINS, Treasurer.
- 1884.—MADISON, WIS.
THOMAS W. BICKNELL, President.
H. S. TARBELL, Secretary.
N. A. CALKINS, Treasurer.
- 1885.—SARATOGA SPRINGS, N. Y.
F. LOUIS SOLDAN, President.
W. E. SHELTON, Secretary.
N. A. CALKINS, Treasurer.
- 1886.—TOPEKA, KAN.
N. A. CALKINS, President.
W. E. SHELTON, Secretary.
E. C. HEWITT, Treasurer.
- 1887.—CHICAGO, ILL.
W. E. SHELTON, President.
J. H. CANFIELD, Secretary.
E. C. HEWITT, Treasurer.
- 1888.—SAN FRANCISCO, CAL.
AARON GOVE, President.
J. H. CANFIELD, Secretary.
E. C. HEWITT, Treasurer.
- 1889.—NASHVILLE, TENN.
ALBERT P. MARBLE, President.
J. H. CANFIELD, Secretary.
E. C. HEWITT, Treasurer.
- 1890.—ST. PAUL, MINN.
J. H. CANFIELD, President.
W. R. GARRETT, Secretary.
E. C. HEWITT, Treasurer.
- 1891.—TORONTO, ONTARIO.
W. R. GARRETT, President.
E. H. COOK, Secretary.
J. M. GREENWOOD, Treasurer.
- 1892.—SARATOGA SPRINGS, N. Y.
E. H. COOK, President.
R. W. STEVENSON, Secretary.
J. M. GREENWOOD, Treasurer.
- 1893.—CHICAGO, ILL.
(International Congress of Education.)
ALBERT G. LANE, President.
IRWIN SHEPARD, Secretary.
J. M. GREENWOOD, Treasurer.
- 1894.—ASBURY PARK, N. J.
ALBERT G. LANE, President.
IRWIN SHEPARD, Secretary.
J. M. GREENWOOD, Treasurer.
- 1895.—DENVER, COLO.
NICHOLAS MURRAY BUTLER, President.
IRWIN SHEPARD, Secretary.
I. C. MCNEILL, Treasurer.
- 1896.—BUFFALO, N. Y.
NEWTON C. DOUGHERTY, President.
IRWIN SHEPARD, Secretary.
I. C. MCNEILL, Treasurer.
- 1897.—MILWAUKEE, WIS.
CHARLES R. SKINNER, President.
IRWIN SHEPARD, Secretary.
I. C. MCNEILL, Treasurer.
- 1898.—WASHINGTON, D. C.
J. M. GREENWOOD, President.
IRWIN SHEPARD, Secretary.
I. C. MCNEILL, Treasurer.
- 1899.—LOS ANGELES, CAL.
E. ORAM LYTE, President.
IRWIN SHEPARD, Secretary.
I. C. MCNEILL, Treasurer.
- 1900.—CHARLESTON, S. C.
OSCAR T. CORSON, President.
IRWIN SHEPARD, Secretary.
CARROLL G. PEARSE, Treasurer.
- 1901.—DETROIT, MICH.
JAMES M. GREEN, President.
IRWIN SHEPARD, Secretary.
L. C. GREENLEE, Treasurer.

NATIONAL EDUCATIONAL ASSOCIATION OF THE UNITED STATES

OFFICERS FOR 1900-1901

GENERAL ASSOCIATION

JAMES M. GREEN	<i>President</i>	Trenton, N. J.
IRWIN SHEPARD	<i>Secretary</i>	Winona, Minn.
LEWIS C. GREENLEE	<i>Treasurer</i>	Denver, Colo.

VICE-PRESIDENTS

OSCAR T. CORSON, Columbus, O.	W. H. BARTHOLOMEW, Louisville, Ky.
J. A. FOSHAY, Los Angeles, Cal.	O. H. COOPER, Waco, Tex.
H. P. ARCHER, Charleston, S. C.	WILLIAM M. DAVIDSON, Topeka, Kan.
H. B. BROWN, Valparaiso, Ind.	R. B. FULTON, University, Miss.
FRANCIS W. PARKER, Chicago, Ill.	GERTRUDE EDMUND, Lowell, Mass.
L. W. BUCHHOLZ, Tampa, Fla.	H. E. KRATZ, Sioux City, Ia.

BOARD OF TRUSTEES

(See Art. IV, sec. 9, of the constitution.)

ALBERT G. LANE	<i>Chairman</i>	Chicago, Ill.
NICHOLAS MURRAY BUTLER	<i>Secretary</i>	New York, N. Y.
F. LOUIS SOLDAN	St. Louis, Mo.	Term expires July, 1901
NICHOLAS MURRAY BUTLER	New York, N. Y.	Term expires July, 1902
ALBERT G. LANE	Chicago, Ill.	Term expires July, 1903
NEWTON C. DOUGHERTY	Peoria, Ill.	Term expires July, 1904
JAMES M. GREEN	Trenton, N. J.	<i>Ex officio</i>

EXECUTIVE COMMITTEE

(See Art. IV, secs. 2 and 11, of the constitution.)

JAMES M. GREEN	<i>President</i>	Trenton, N. J.
OSCAR T. CORSON	<i>First Vice-President</i>	Columbus, O.
LEWIS C. GREENLEE	<i>Treasurer</i>	Denver, Colo.
ALBERT G. LANE	<i>Chairman Board of Trustees</i>	Chicago, Ill.
WM. T. HARRIS	<i>Member by election</i>	Washington, D. C.
IRWIN SHEPARD	<i>Secretary</i>	Winona, Minn.

BOARD OF DIRECTORS

Directors ex officio

(See Art. IV, sec. 2, of the constitution.)

JAMES M. GREEN, Trenton, N. J.	LEWIS C. GREENLEE, Denver, Colo.
OSCAR T. CORSON, Columbus, O.	ALBERT G. LANE, Chicago, Ill.
IRWIN SHEPARD, Winona, Minn.	

Life Directors

(See Art. IV, sec. 2, of the constitution.)

BICKNELL, THOMAS W., Providence, R. I.	CANFIELD, JAMES H., New York, N. Y.
BOARD OF EDUCATION, Nashville, Tenn.	COOK, E. H., Yonkers, N. Y.
BUTLER, NICHOLAS MURRAY, New York, N. Y.	CORSON, OSCAR T., Columbus, O.

Life Directors—*continued*

DOUGHERTY, NEWTON C., Peoria, Ill.
 *FAIRCHILD, GEORGE T., Berea, Ky.
 GARRETT, W. R., Nashville, Tenn.
 GOVE, AARON, Denver, Colo.
 GRAMAM, H. A., Grayling, Mich.
 GREENWOOD, J. M., Kansas City, Mo.
 *HALL, CALES G., New Berlin, N. Y.
 HARRIS, WM. T., Washington, D. C.
 HUNT, MARY H., Boston, Mass.
 JEWETT, A. V., Abilene, Kan.
 LANE, ALBERT G., Chicago, Ill.
 LYTE, E. ORAM, Millersville, Pa.
 MARBLE, ALBERT P., New York, N. Y.

MARSHALL, T. MARCELLUS, Glenville, W. Va.
 PARKER, CHARLES I., South Chicago, Ill.
 PHELPS, W. F., Duluth, Minn.
 PICKARD, JOSIAN L., Brunswick, Me.
 PIKE, JOSHUA, Jerseyville, Ill.
 SKINNER, CHARLES R., Albany, N. Y.
 SOLDAN, F. LOUIS, St. Louis, Mo.
 STRATTON, C. C., University Park, Ore.
 TAYLOR, A. R., Emporia, Kan.
 TEACHERS' INSTITUTE, Philadelphia, Pa.
 WHITE, CHARLES G., Lake Linden, Mich.
 WHITE, E. E., Columbus, O.
 WILSON, J. ORMOND, Washington, D. C.

Directors by Election

North Atlantic Division

Maine.....	JOHN S. LOCKE.....	Saco
New Hampshire.....	JAMES E. KLOCK.....	Plymouth
Vermont.....	JOHN L. ALGER.....	Johnson
Massachusetts.....	FRANK A. FITZPATRICK.....	Boston
Rhode Island.....	GEORGE E. CHURCH.....	Providence
Connecticut.....	CHARLES H. KEYES.....	Hartford
New York.....	A. S. DOWNING.....	New York
New Jersey.....	H. BREWSTER WILLIS.....	New Brunswick
Pennsylvania.....	H. W. FISHER.....	Pittsburg

South Atlantic Division

Delaware.....	A. H. BERLIN.....	Wilmington
Maryland.....	M. BATES STEPHENS.....	Baltimore
District of Columbia.....	W. B. POWELL.....	Washington
Virginia.....	GEORGE J. RAMSEY.....	Richmond
West Virginia.....	J. WALTER BARNES.....	Fairmont
North Carolina.....	W. T. WHITSETT.....	Whitsett
South Carolina.....	W. K. TATE.....	Charleston
Florida.....	MISS CLEM HAMPTON.....	Live Oak

South Central Division

Kentucky.....	MCHEMRY RHOADS.....	Owensboro
Tennessee.....	M. M. ROSS.....	Nashville
Georgia.....	W. M. SLATON.....	Atlanta
Alabama.....	JOHN W. ASHCROMBIE.....	Montgomery
Mississippi.....	H. L. WHITFIELD.....	Jackson
Louisiana.....	WARREN EASTON.....	New Orleans
Texas.....	J. M. FENDLEY.....	Galveston
Oklahoma.....	DAVID R. BOYD.....	Norman
Arkansas.....	J. R. RIGHTSELL.....	Little Rock

North Central Division

Ohio.....	N. H. CHANEY.....	Chillicothe
Indiana.....	T. A. MOTT.....	Richmond
Illinois.....	J. H. COLLINS.....	Springfield
Michigan.....	D. W. SPRINGER.....	Ann Arbor
Wisconsin.....	L. D. HARVEY.....	Madison
Iowa.....	W. M. BEARDSHEAR.....	Ames
Minnesota.....	C. M. JORDAN.....	Minneapolis
Missouri.....	W. T. CARRINGTON.....	Jefferson City
North Dakota.....	W. E. HOOVER.....	Park River
South Dakota.....	E. E. COLLINS.....	Vermillion
Nebraska.....	C. G. PEARSE.....	Omaha
Kansas.....	FRANK R. DYER.....	Wichita

Western Division

Montana.....	E. A. CARLETON.....	Helena
Wyoming.....	MISS ESTELLE REEL.....	Washington, D. C.
Colorado.....	H. S. PHILIPS.....	Denver

*Deceased.

Directors by Election—continued

Western Division—continued

New Mexico.....	MRS. E. R. JACKSON.....	Silver City
Arizona.....	MILTON J. NEEDHAM.....	Algert
Utah.....	F. B. COOPER.....	Salt Lake City
Nevada.....	J. E. STUBBS.....	Reno
Idaho.....	J. C. BLACK.....	Albion
Washington.....	O. C. WHITNEY.....	Tacoma
Oregon.....	*E. B. McELROY.....	Eugene
California.....	J. A. FOSHAY.....	Los Angeles

DEPARTMENT OFFICERS

National Council

CHARLES M. JORDAN.....	<i>President</i>	Minneapolis, Minn.
MISS BETTIE A. DUTTON.....	<i>Vice-President</i>	Cleveland, O.
J. H. PHILLIPS.....	<i>Secretary</i>	Birmingham, Ala.
ELMER E. BROWN.....	<i>Executive Committee</i>	Berkeley, Cal.
NICHOLAS MURRAY BUTLER.....	<i>Executive Committee</i>	New York, N. Y.
JOSEPH SWAIN.....	<i>Executive Committee</i>	Bloomington, Ind.

Kindergarten

MISS EVELYN HOLMES.....	<i>President</i>	Charleston, S. C.
MISS CAROLINE HART.....	<i>Vice-President</i>	Baltimore, Md.
MISS ANNIE LAWS.....	<i>Secretary</i>	Cincinnati, O.

Elementary

J. W. CARR.....	<i>President</i>	Anderson, Ind.
J. C. HARRIS.....	<i>Vice-President</i>	Rome, Ga.
Mrs. SARA D. JENKINS.....	<i>Secretary</i>	Ithaca, N. Y.

Secondary

W. J. S. BRYAN.....	<i>President</i>	St. Louis, Mo.
MISS NETTIE FILLMORE.....	<i>Vice-President</i>	Cincinnati, O.
C. A. GRAESER.....	<i>Secretary</i>	Charleston, S. C.

Higher

CHARLES F. THWING.....	<i>President</i>	Cleveland, O.
WILLIAM M. BEARDSHEAR.....	<i>Vice-President</i>	Ames, Ia.
WILLIAM H. BLACK.....	<i>Secretary</i>	Marshall, Mo.

Normal

CHARLES D. McIVER.....	<i>President</i>	Greensboro, N. C.
Z. X. SNYDER.....	<i>Vice-President</i>	Greeley, Colo.
MYRON T. SCUDDER.....	<i>Secretary</i>	New Paltz, N. Y.

Superintendence

L. D. HARVEY.....	<i>President</i>	Madison, Wis.
A. K. WHITCOMB.....	<i>First Vice-President</i>	Lowell, Mass.
W. F. SLATON.....	<i>Second Vice-President</i>	Atlanta, Ga.
F. B. COOPER.....	<i>Secretary</i>	Salt Lake City, Utah

Manual

CHARLES A. BENNETT.....	<i>President</i>	Peoria, Ill.
B. A. LENFEST.....	<i>Vice-President</i>	Waltham, Mass.
L. A. BUCHANAN.....	<i>Secretary</i>	Stockton, Cal.

Art

MISS BONNIE E. SNOW.....	<i>President</i>	Minneapolis, Minn.
MISS MYRA JONES.....	<i>Vice-President</i>	Detroit, Mich.
FRED J. ORR.....	<i>Secretary</i>	Athens, Ga.

Music

A. J. GANTVOORT.....	<i>President</i>	Cincinnati, O.
Mrs. EMMA A. THOMAS.....	<i>Vice-President</i>	Detroit, Mich.
H. W. GRAY.....	<i>Secretary</i>	New York, N. Y.

*Deceased.

Business

WILLIAM E. DOGGETT	<i>President</i>	Brooklyn, N. Y.
WILLARD J. WHEELER	<i>Vice-President</i>	Birmingham, Ala.
EDWARD W. STITT	<i>Secretary</i>	New York, N. Y.

Child Study

THOMAS P. BAILEY, JR.	<i>President</i>	Chicago, Ill.
MISS MARION BROWN	<i>Vice-President</i>	New Orleans, La.
MANFRED J. HOLMES	<i>Secretary</i>	Normal, Ill.

Physical Training

W. O. KROHN	<i>President</i>	Chicago, Ill.
MISS REBECCA STONEROAD	<i>Vice-President</i>	Washington, D. C.
MISS MABEL PRAY	<i>Secretary</i>	Toledo, O.

Science

N. A. HARVEY	<i>President</i>	Chicago, Ill.
CHARLES B. WILSON	<i>Vice-President</i>	Westfield, Mass.
CHARLES N. COBB	<i>Secretary</i>	Albany, N. Y.

School Administration

W. S. ELLIS	<i>President</i>	Anderson, Ind.
ISRAEL H. PERES	<i>First Vice-President</i>	Memphis, Tenn.
JOHN OGREN	<i>Second Vice-President</i>	Charleston, S. C.
W. A. HUNT	<i>Third Vice-President</i>	Northfield, Minn.
WILLIAM GEORGE BRUCE	<i>Secretary</i>	Milwaukee, Wis.

Library

ROBERT C. METCALF	<i>President</i>	Boston, Mass.
JEROME H. RAYMOND	<i>Vice-President</i>	Morgantown, W. Va.
MISS MARY EILEEN AHERN	<i>Secretary</i>	Chicago, Ill.

Deaf, Blind, etc.

MISS MARY McCOWEN	<i>President</i>	Chicago, Ill.
E. R. JOHNSTONE	<i>Vice-President</i>	Vineland, N. J.
E. A. GRUVER	<i>Secretary</i>	New York, N. Y.
EDWARD E. ALLEN	<i>Chairman of Executive Committee</i>	Overbrook, Pa.

Indian Education

H. B. FRISSELL	<i>President</i>	Hampton, Va.
MISS ESTELLE REEL	<i>Vice-President</i>	Washington, D. C.
F. F. AVERY	<i>Secretary</i>	Miles, Wash.

NATIONAL EDUCATIONAL ASSOCIATION OF THE UNITED STATES

OFFICERS FOR 1901-1902

GENERAL ASSOCIATION

W. M. BEARDSHEAR.....	<i>President</i>	Ames, Ia.
IRWIN SHEPARD.....	<i>Secretary</i>	Winona, Minn.
CHARLES H. KEYES.....	<i>Treasurer</i>	Hartford, Conn.

VICE-PRESIDENTS

JAMES M. GREEN, Trenton, N. J.	McHENRY RHOADS, Owensboro, Ky.
W. C. MARTINDALE, Detroit, Mich.	EDMUND STANLEY, Wichita, Kan.
R. S. BINGHAM, Tacoma, Wash.	H. S. TARBELL, Providence, R. I.
W. W. CHALMERS, Toledo, O.	S. D. LARGENT, Great Falls, Mont.
A. W. NORTON, Sioux Falls, S. D.	W. M. SLATON, Atlanta, Ga.
J. L. HOLLOWAY, Fort Smith, Ark.	C. M. WOODWARD, St. Louis, Mo.

BOARD OF TRUSTEES

(See Art. IV, sec. 9, of the constitution.)

ALBERT G. LANE.....	<i>Chairman</i>	Chicago, Ill.
NICHOLAS MURRAY BUTLER.....	<i>Secretary</i>	New York, N. Y.
NICHOLAS MURRAY BUTLER.....	New York, N. Y.....	Term expires July, 1902
ALBERT G. LANE.....	Chicago, Ill.....	Term expires July, 1903
NEWTON C. DOUGHERTY.....	Peoria, Ill.....	Term expires July, 1904
F. LOUIS SOLDAN.....	St. Louis, Mo.....	Term expires July, 1905
W. M. BEARDSHEAR.....	Ames, Ia.....	<i>Ex officio</i>

EXECUTIVE COMMITTEE

(See Art. IV, secs. 2 and 11, of the constitution.)

W. M. BEARDSHEAR.....	<i>President</i>	Ames, Ia.
JAMES M. GREEN.....	<i>First Vice-President</i>	Trenton, N. J.
CHARLES H. KEYES.....	<i>Treasurer</i>	Hartford, Conn.
ALBERT G. LANE.....	<i>Chairman Board of Trustees</i>	Chicago, Ill.
WM. T. HARRIS.....	<i>Member by election</i>	Washington, D. C.
IRWIN SHEPARD.....	<i>Secretary</i>	Winona, Minn.

BOARD OF DIRECTORS

Directors ex officio

(See Art. IV, sec. 2, of the constitution.)

W. M. BEARDSHEAR, Ames, Ia.	CHARLES H. KEYES, Hartford, Conn.
JAMES M. GREEN, Trenton, N. J.,	ALBERT G. LANE, Chicago, Ill.
IRWIN SHEPARD, Winona, Minn.	

Life Directors

(See Art. IV, sec. 2, of the constitution.)

BICKNELL, THOMAS W., Providence, R. I.	CANFIELD, JAMES H., New York, N. Y.
BOARD OF EDUCATION, Nashville, Tenn.	COOK, E. H., Yonkers, N. Y.
BUTLER, NICHOLAS MURRAY, New York, N. Y.	CORSON, OSCAR T., Columbus, O.

Life Directors—continued

DOUGHERTY, NEWTON C., Peoria, Ill.	MARSHALL, T. MARCELLUS, Glenville, W. Va.
GARNETT, W. R., Nashville, Tenn.	PARKER, CHARLES I., South Chicago, Ill.
GOVE, AARON, Denver, Colo.	PHELPS, W. F., Duluth, Minn.
GRAHAM, H. A., Grayling, Mich.	PICKARD, JOSIAH L., Brunswick, Me.
GREEN, J. M., Trenton, N. J.	PIKE, JOSHUA, Jerseyville, Ill.
GREENWOOD, J. M., Kansas City, Mo.	SKINNER, CHARLES R., Albany, N. Y.
HARRIS, WM. T., Washington, D. C.	SOLDAN, F. LOUIS, St. Louis, Mo.
HUNT, MARY H., Boston, Mass.	STRATTON, C. C., University Park, Ore.
JEWETT, A. V., Abilene, Kan.	TAYLOR, A. R., Decatur, Ill.
LANE, ALBERT G., Chicago, Ill.	TEACHERS' INSTITUTE, Philadelphia, Pa.
LITE, E. ORAM, Millersville, Pa.	WHITE, CHARLES G., Lake Linden, Mich.
MARBLE, ALBERT P., New York, N. Y.	WHITE, E. E., Columbus, O.
WILSON, J. ORMOND, Washington, D. C.	

*Directors by Election**North Atlantic Division*

Maine	JOHN S. LOCKE	Saco
New Hampshire	J. E. KLOCK	Plymouth
Vermont	JOHN L. ALGER	Johnson
Massachusetts	FRANK A. FITZPATRICK	Boston
Rhode Island	WALTER BALLOU JACOBS	Providence
Connecticut	WILBUR F. GORDY	Hartford
New York	A. S. DOWNING	New York
New Jersey	H. BREWSTER WILLIS	New Brunswick
Pennsylvania	WATSON CORNELL	Philadelphia

South Atlantic Division

Delaware	GEORGE W. TWITMYER	Wilmington
Maryland	M. BATES STEPHENS	Baltimore
District of Columbia	HOSMER M. JOHNSON	Anacostia
Virginia	GEORGE J. RAMSEY	Richmond
West Virginia	W. H. ANDERSON	Wheeling
North Carolina	CHARLES D. MCIVER	Greensboro
South Carolina	D. B. JOHNSON	Rock Hill
Florida	W. N. SHEATS	Tallahassee

South Central Division

Kentucky	W. H. BARTHOLOMEW	Louisville
Tennessee	M. M. ROSS	Nashville
Georgia	M. L. BRITTAIN	Atlanta
Alabama	JOHN W. ABERCROMBIE	Montgomery
Mississippi	J. R. PRESTON	Natchez
Louisiana	WARREN EASTON	New Orleans
Texas	J. M. FENDLEY	Galveston
Oklahoma	DAVID R. BOYD	Norman
Arkansas	GEORGE B. COOK	Hot Springs

North Central Division

Ohio	J. M. H. FREDERICK	Lakewood
Indiana	T. A. MOTT	Richmond
Illinois	ALFRED BAVLISS	Springfield
Michigan	D. W. SPRINGER	Ann Arbor
Wisconsin	L. D. HARVEY	Madison
Iowa	H. E. KRATZ	Sioux City
Minnesota	C. M. JORDAN	Minneapolis
Missouri	W. T. CARRINGTON	Jefferson City
North Dakota	W. E. HOOVER	Park River
South Dakota	E. E. COLLINS	Vermillion
Nebraska	C. G. PEARSE	Omaha
Kansas	FRANK R. DYER	Wichita

Western Division

Montana	W. W. WELCH	Helena
Wyoming	MISS ESTELLE REEL	Washington, D. C.
Colorado	H. S. PHILIPS	Denver

Directors by Election—continued

Western Division—continued

New Mexico	HIRAM HADLEY	Las Cruces
Arizona	F. YALE ADAMS	Tucson
Utah	W. J. KERR	Logan
Nevada	J. E. STUBBS	Reno
Idaho	MISS PERMEAL FRENCH	Boise
Washington	CHARLES M. SHERMAN	Snohomish
Oregon	E. D. RESSLER	Eugene
California	JAMES A. FOSHAY	Los Angeles

DEPARTMENT OFFICERS

National Council

J. H. PHILLIPS	<i>President</i>	Birmingham, Ala.
Miss MARY E. NICHOLSON	<i>Vice-President</i>	Indianapolis, Ind.
JESSE F. MILLSPAUGH	<i>Secretary</i>	Winona, Minn.
NICHOLAS MURRAY BUTLER	<i>Executive Committee</i>	New York, N. Y.
JOSEPH SWAIN	<i>Executive Committee</i>	Bloomington, Ind.
RICHARD G. BOONE	<i>Executive Committee</i>	Cincinnati, O.

Kindergarten

Miss C. GERALDINE O'GRADY	<i>President</i>	New York, N. Y.
Miss CLARA W. MINGINS	<i>Vice-President</i>	Detroit, Mich.
Miss MARY C. MAY	<i>Secretary</i>	Salt Lake City, Utah

Elementary

R. A. OGG	<i>President</i>	Kokomo, Ind.
J. J. DOYNE	<i>Vice-President</i>	Little Rock, Ark.
Miss ADDA P. WERTZ	<i>Secretary</i>	Carbondale, Ill.

Secondary

J. REMSEN BISHOP	<i>President</i>	Cincinnati, O.
W. F. WEBSTER	<i>Vice-President</i>	Minneapolis, Minn.
Vacant	<i>Secretary</i>	

Higher

W. H. P. FAUNCE	<i>President</i>	Providence, R. I.
C. W. DABNEY	<i>Vice-President</i>	Knoxville, Tenn.
JOHN W. PERRIN	<i>Secretary</i>	Cleveland, O.

Normal

JESSE F. MILLSPAUGH	<i>President</i>	Winona, Minn.
MYRON TRACY SCUDDER	<i>Vice-President</i>	New Paltz, N. Y.
JOHN R. KIRK	<i>Secretary</i>	Kirkville, Mo.

Superintendence

G. R. GLENN	<i>President</i>	Atlanta, Ga.
H. P. EMERSON	<i>First Vice-President</i>	Buffalo, N. Y.
F. W. COOLEY	<i>Second Vice-President</i>	Calumet, Mich.
JOHN W. DIETRICH	<i>Secretary</i>	Colorado Sp'gs, Colo.

Manual

CHARLES R. RICHARDS	<i>President</i>	New York, N. Y.
CHARLES F. WARNER	<i>Vice-President</i>	Springfield, Mass.
J. H. TRYBOM	<i>Secretary</i>	Detroit, Mich.

Art

Miss MYRA JONES	<i>President</i>	Detroit, Mich.
Miss RODA SELLECK	<i>Vice-President</i>	Indianapolis, Ind.
Miss EMILY H. MILES	<i>Secretary</i>	Denver, Colo.

Music

A. J. GANTVOORT	<i>President</i>	Cincinnati, O.
STERRIE A. WEAVER	<i>Vice-President</i>	Westfield, Mass.
MRS. GASTON BOYD	<i>Secretary</i>	Newton, Kan.

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L. O. CRISSY	<i>President</i>	Albany, N. Y.
J. H. FRANCIS	<i>Vice-President</i>	Los Angeles, Cal.
TEMPLETON P. TWIGGS	<i>Secretary</i>	Detroit, Mich.

Child Study

H. E. KRATZ	<i>President</i>	Sioux City, Ia.
Miss JENNIE WARREN PRENTISS ..	<i>Vice-President</i>	Cleveland, O.
Miss KATE HOPPER ..	<i>Secretary</i>	Detroit, Mich.

Physical Training

W. O. KROHN	<i>President</i>	Chicago, Ill.
THEODORE TOEPEL	<i>First Vice-President</i>	Atlanta, Ga.
Miss M. AUGUSTA REQUA	<i>Second Vice-President</i>	New York, N. Y.
Miss MABEL L. PRAY	<i>Secretary</i>	Toledo, O.

Science

FRANKLIN W. BARROWS	<i>President</i>	Buffalo, N. Y.
W. H. NORTON	<i>Vice-President</i>	Mt. Vernon, Ia.
Vacant	<i>Secretary</i>	

School Administration

ISRAEL H. PERES	<i>President</i>	Memphis, Tenn.
MRS. JOSEPHINE A. GOSS	<i>First Vice-President</i>	Grand Rapids, Mich.
L. D. BONEBRAKE	<i>Second Vice-President</i>	Columbus, O.
GEORGE FENTON	<i>Third Vice-President</i>	Broadalbin, N. Y.
WILLIAM GEORGE BRUCE	<i>Secretary</i>	Milwaukee, Wis.

Library

JAMES H. CANFIELD	<i>President</i>	New York, N. Y.
REUBEN POST HALLECK	<i>Vice-President</i>	Louisville, Ky.
Miss MARY EILEEN AHERN	<i>Secretary</i>	Chicago, Ill.

Deaf, Blind, etc.

ALEXANDER GRAHAM BELL	<i>President</i>	Washington, D. C.
E. E. ALLEN	<i>Vice-President</i>	Overbrook, Pa.
E. A. GRUVER	<i>Secretary</i>	New York, N. Y.

Indian Education

SAMUEL M. McCOWAN	<i>President</i>	Phoenix, N. M.
H. B. FRISSELL	<i>Vice-President</i>	Hampton, Va.
Miss ESTELLE REEL	<i>Secretary</i>	Washington, D. C.

SEC. 4. The Board of Directors shall hold its regular meetings at the place and not less than two hours before the assembling of the association.

SEC. 5. Special meetings may be held at such other times and places as the board or the President shall determine.

SEC. 6. Each new board shall organize at the session of its election. At its first meeting a committee on publication shall be appointed, which shall consist of the President and the Secretary of the association for the previous year, and one member from each department.

ARTICLE VI—BY-LAWS

By-laws not inconsistent with this constitution may be adopted by a two-thirds vote of the association.

ARTICLE VII—AMENDMENTS

This constitution may be altered or amended at a regular meeting by the unanimous vote of the members present; or by a two-thirds vote of the members present, provided that the alteration or amendment has been substantially proposed in writing at a previous meeting.

BY-LAWS

1. At the first session of each annual meeting of the association there shall be appointed by the President a committee on resolutions; and at the third session of such meeting there shall be appointed a committee on nominations, consisting of one member from each state and territory represented, the same to be appointed by the President on the nomination of a majority of the active members in attendance from such state or territory; provided, however, that such appointment shall be made by the President without such nomination, when less than three active members from a state or territory are in attendance, and also when a majority of the active members in attendance from any state or territory shall fail to make a nomination.

The meetings of active members to nominate members of the nominating committee shall be held at 5:30 P. M. on the first day of the annual meeting of the association, at such places as shall be announced in the general program.

2. The President and Secretary shall certify to the Board of Trustees all bills approved by the Board of Directors.

3. Each paying member of the association shall be entitled to a copy of its proceedings.

4. No paper, lecture, or address shall be read before the association or any of its departments in the absence of its author, nor shall any such paper, lecture, or address be published in the volume of proceedings, without the consent of the association, upon approval of the Executive Committee.

5. It shall be the duty of the President, Secretary, and Treasurer of the association to appoint annually some competent person to examine the securities of the Permanent Fund held by the Board of Trustees, and his certificate, showing the condition of the said fund, shall be attached to the report of the Board of Trustees.

ACT OF INCORPORATION

At a meeting of the Board of Directors of the National Educational Association, held at Saratoga Springs, N. Y., July 14, 1885, the following resolution was passed:

Resolved, That a committee of three be appointed to secure articles of incorporation for the National Educational Association, under United States or state laws, as speedily as may be.

N. A. Calkins, of New York; Thomas W. Bicknell, of Massachusetts; and Eli T. Tappan, of Ohio, were appointed such committee.

Under the authority of the resolution quoted above, and with the approval of the committee, and by competent legal advice, the chairman obtained a

CERTIFICATE OF INCORPORATION

We, the undersigned, Norman A. Calkins, John Eaton, and, Zalmon Richards, citizens of the United States, and two of them citizens of the District of Columbia, do hereby associate ourselves together, pursuant to the provisions of the Act of General Incorporation, Class Third, of the Revised Statutes of the District of Columbia, under the name of the "National Educational Association," for the full period of twenty years, the purpose and objects of which are to elevate the character and advance the interests of the profession of teaching and to promote the cause of popular education in the United States. . . . To secure the full benefit of said act we do here execute this our certificate of incorporation as said act provides.

In witness whereof, we severally set our hands and seals this 24th day of February, 1886, at Washington, D. C.

NORMAN A. CALKINS. [L. S.]

JOHN EATON. [L. S.]

ZALMON RICHARDS. [L. S.]

Duly acknowledged before Michael P. Callan, Notary Public in and for the District of Columbia, and recorded in Liber No. 4, Acts of Incorporation for the District of Columbia.

MISCELLANEOUS — *continued*:

Secretary's furniture (32).....	\$ 17.95	
Joint Agency, Washington (44).....	534.52	
Premium on Treasurer's bond (49).....	25.00	
Postage on reports, Department of Superintendence (93).....	47.90	
Miscellaneous supplies, Charleston (66).....	30.25	
Conde B. Pallen (traveling expenses) (20).....	47.50	
		<u>\$1,967.00</u>
Total expenditures.....		\$16,283.30
Excess of receipts over expenditures — balance on hand		<u>4,113.04</u>
		<u>\$20,396.34</u>
Net receipts for the year.....	\$16,599.67	
Expenses for the year	16,283.30	
Excess of net receipts over expenditures.....	\$ 316.37	

DETROIT, MICH., July 8, 1901.

The undersigned trustees of the National Educational Association have this day examined and approved the foregoing accounts of Mr. L. C. Greenlee, Treasurer, with all statements of receipts and vouchers for expenditures.

(Signed) { A. G. LANE.
N. C. DOUGHERTY.
J. M. GREEN.
NICHOLAS MURRAY BUTLER.

FIFTEENTH ANNUAL REPORT OF THE BOARD OF TRUSTEES

To the Board of Directors of the National Educational Association:

The Board of Trustees presents the following report of the Permanent Fund of the National Educational Association, and its income, for the year ending June 30, 1901:

Permanent Fund, July 1, 1900:

Mortgages on real estate	\$45,500.00	
Kansas school and municipal bonds.....	18,890.00	
Illinois, Indiana, and Missouri school bonds.....	18,500.00	
Cash on hand for investment.....	5,110.00	
		<u>\$88,000.00</u>

Permanent Fund, July 1, 1901:

In the following items:

Mortgages on real estate	\$37,500.00	
Kansas school and municipal bonds.....	15,100.00	
Illinois, Indiana, and Missouri school bonds.....	31,500.00	
Total	\$84,100.00	
Cash on hand for investment.....	3,900.00	
		<u>\$88,000.00</u>

INVESTMENTS

Investment, July 1, 1900..... \$82,890.00

Paid during the year:

First mortgage, 428 W. Adams street, Chicago.....	\$ 8,000.00	
Lemont, Ill., Bonds 4 and 6.....	1,000.00	
Barton county, Kan., S. D. 66.....	330.00	
Cowley county, Kan., S. D. 143.....	360.00	
Eudora City, Kan., Bond No. 9.....	100.00	
De Kalb, Ill., Bond No. 2.....	1,000.00	
City of Concordia, Kan.....	3,000.00	
		<u>13,790.00</u>
		<u>\$69,100.00</u>

Investments, during the year:

Chicago improvement bonds, 6 per cent., yielding $4\frac{3}{4}$ per cent.....	15,000.00	
Total investment, July 1, 1901.....		<u>\$84,100.00</u>

INCOME STATEMENT

Receipts from interest:

Barton county, Kan., S. D. 66.....	\$ 9.90	
Cowley county, Kan., S. D. 143.....	10.80	
Ness county, Kan., S. D. 41.....	18.00	
Ness county, Kan., S. D. 70.....	30.00	
Norton county, Kan., S. D. 95.....	18.00	
Reno county, Kan., S. D. 51.....	60.00	
Reno county, Kan., S. D. 129.....	18.00	
City of Concordia, Kan.....	180.00	
City of Eudora, Kan.....	54.00	
Hodgeman county, Kan.....	60.00	
McPherson county, Kan., Sharp's Creek township.....	60.00	
Montgomery county, Kan., Caney township.....	60.00	
Kansas City, Mo.....	100.00	
Noblesville, Ind.....	250.00	
De Kalb, Ill.....	100.00	
Morgan Park, Ill.....	175.00	
Lemont, Ill.....	289.96	
First mortgage, Providence, R. I.....	270.00	
First mortgage, 1919 Wabash avenue, Chicago.....	125.30	
First mortgage, 5136 Hibbard avenue, Chicago.....	250.00	
First mortgage, 428 W. Adams street, Chicago.....	480.00	
First mortgage, 5603 Madison avenue, Chicago.....	250.00	
First mortgage, First Universalist Church, Englewood.....	500.00	
First mortgage, 4762 Lake avenue, Chicago.....	250.00	
First mortgage, 4802 Lake avenue, Chicago.....	225.00	
Interest on certificate of deposit.....	51.07	
		\$3,883.03
Disbursements:		
Transferred to L. C. Greenlee, Treasurer.....		\$3,883.03

STATEMENT OF SECURITIES AND BONDS BELONGING TO THE PERMANENT FUND OF
THE NATIONAL EDUCATIONAL ASSOCIATION, JULY 1, 1901

KANSAS SCHOOL BONDS

County	Number school district	Amount	Rate of interest per cent.	Interest payable	Bond due
Garfield ^a	24	\$ 800	6	Jan. and July	Jan., 1910
Ness.....	41	300	6	"	July, 1905
Ness.....	70	500	6	"	July, 1903
Norton.....	95	200	6	"	July, 1902
Reno.....	51	1,000	6	"	July, 1902
Reno.....	129	300	6	"	Jan., 1902
		\$3,000			

KANSAS COUNTY AND MUNICIPAL BONDS

County	Kind of bond	Bond Nos.	Amount	Interest per cent.	Interest payable	Bond due
Douglas.....	Eudora City	10 to 20	\$1,100	6	March	One due each year March 1
Grant ^a	County	47, 48	2,000	6	Jan. and July	February, 1920
Hodgeman.....	County	1	1,000	6	Jan. and July	July 1, 1918
Lane ^a	County	11 to 13	3,000	6	Jan. and July	July 1, 1918
Marion ^a	City of Marion	1	1,000	5½	Mar. and Sept.	March 1, 1900
McPherson.....	Sharp's Creek Tp.	1	1,000	6	Jan. and July	Sept. 1, 1916
Montgomery.....	Caney township	1, 2	1,000	6	April and Oct.	Oct. 1, 1916
Reno ^a	City South Hutchinson	1, 2	1,000	7	Feb. and Aug.	April 1, 1908
Seward ^a	With Bentley & Hatfield, Wichita, Kan.	....	1,000	...	Judgm't obtain'd	.....
			\$12,100			

^a Interest or principal in default.

ILLINOIS, INDIANA, AND MISSOURI SCHOOL BONDS

County	Amount	Rate of interest	Interest payable	Bond due
Jackson, Kansas City, Mo.	\$ 2,000	5	Jan. and July	July 1, 1901
Noblesville, Ind.	5,000	5	Jan. and July	July 1, 1912
De Kalb, Ill.	1,000	5	April 1	April 1, 1902
Cook, village of Morgan Park, Ill.	3,500	5	Mar. and Sept.	Sept., 1905
Lemont, Ill., School Nos. 8, 12, 14, 16, 18, 20, 22, 24, 30, 32.	5,000	5	June and Dec.	\$1,000 yearly Dec. 1
Chicago improvement bonds	15,000	5	December	Dec., 1901-2-3 and 4
	\$31,500			
REAL ESTATE				
Providence real estate, first mortgage.	\$ 3,000	6		
First mortgage, 1919 Wabash ave., Chicago.	5,000	5	May and Nov. 1	May 1, 1903
First mortgage, 5136 Hibbard ave., Chicago	5,000	5	May and Nov. 1	Nov. 1, 1903
First mortgage, 5603 Madison ave., Chicago	5,000	5	July and Jan.	July 1, 1905
First mortgage, First Universalist Church, Chicago.	10,000	5	Oct. and April	Oct., 1905
First mortgage, 4762 Lake ave., Chicago ...	5,000	5	Mar. and Sept.	Mar., 1905
First mortgage, 4802 Lake ave., Chicago ...	4,500	5	Mar. and Sept.	1905
	\$37,500			

Respectfully submitted,

ALBERT G. LANE, *Chairman*,
 NICHOLAS MURRAY BUTLER,
 J. M. GREEN,
 F. LOUIS SOLDAN,
 N. C. DOUGHERTY,
Board of Trustees.

The foregoing securities were examined at the Merchants' Safety Deposit Vaults, Chicago, June 29, 1900, and I certify that the above is a correct statement of the investments belonging to the Permanent Fund of the National Educational Association in the custody of A. G. Lane, chairman of the Board of Trustees.

BLOOMINGTON, IND.,
 September 16, 1901.

(Signed) JOSEPH SWAIN, *Examiner.*

JOURNAL OF PROCEEDINGS
OF THE
FORTIETH ANNUAL MEETING
OF THE
NATIONAL EDUCATIONAL ASSOCIATION
DETROIT, MICH., JULY 9-12, 1901

FIRST DAY'S PROCEEDINGS

OPENING SESSION.—TUESDAY, JULY 9, 2:30 P. M.

The association met in the Light Guard Armory at 2:30 o'clock, and was called to order by Professor O. G. Frederick, chairman of the Local Executive Committee of Detroit.

Music—song, "Morning Invitation," *Veasie*; chorus of five hundred children; Mrs. Emma A. Thomas, director.

The audience was led in an invocation by Rev. A. H. Barr, pastor of the Jefferson Avenue Baptist Church of Detroit.

Addresses of welcome were made by his excellency, Hon. A. T. Bliss, governor of Michigan; Hon. Delos Fall, state superintendent of public instruction; Hon. W. C. Maybury, mayor of Detroit; President James B. Angell, University of Michigan; Wales C. Martindale, superintendent of city schools of Detroit.

Music—song, "Lend Me Thine Aid!" *Gounod*; Mr. Harold Jarvis; song, (a) "Anchored," (b) "Floating," *Veasie*; Mr. Jarvis and chorus.

The conduct of the meeting was then transferred to Dr. James M. Green, President of the National Educational Association, who was introduced by Chairman Frederick.

President Green introduced Dr. Richard G. Boone, superintendent of city schools, Cincinnati, O., who responded to the addresses of welcome.

The President announced the Committee on Resolutions, as follows:

E. Oram Lyte, of Pennsylvania, *chairman*.

Livingston C. Lord, of Illinois.

William F. King, of Iowa.

L. E. Wolfe, of Kansas.

Joseph Swain, of Indiana.

W. T. Carrington, of Missouri.

W. K. Tate, of South Carolina.

J. V. Calhoun, of Louisiana.

James B. Angell, of Michigan.

The Secretary read several announcements concerning the annual meeting of the active members from each state for the selection of nominees to the President as members of the general nominating committee, in accordance with By-Law No. 1.

The meeting then adjourned.

SECOND SESSION.—TUESDAY, JULY 9, 8 P. M.

The meeting was called to order by Vice-President Oscar T. Corson.

Music—double quartet, "Bridal Chorus," *Cowen*.

President Green delivered the annual presidential address, on "The Duty of the National Educational Association in Shaping Public Educational Opinion."

Music—song, "The Two Grenadiers," *Schumann*; Mr. Oscar Garissen.

Rt. Rev. John Lancaster Spalding, bishop of Peoria, Ill., addressed the convention on the subject "Progress in Education."

SECOND DAY'S PROCEEDINGS

THIRD SESSION.—WEDNESDAY, JULY 10, 9:30 A. M.

The meeting was called to order by President Green.

Music—trio, (a) "Meditation," *Richardson*; (b) "Intermezzo," *Mascagni*; violin, Miss Carlotta McDonald; cello, Miss Emma McDonald; piano, Miss Kate McDonald.

Prayer was offered by Rt. Rev. John S. Foley, bishop of Detroit.

The subject for the morning's discussion was "Elementary Education."

The first paper was presented by Superintendent F. Louis Soldan, city schools, St. Louis, Mo.; subject, "What is a Fad?"

A paper on the subject, "Is the Curriculum Overcrowded?" was read by Superintendent J. H. Van Sickle, city schools, Baltimore, Md.

Charles R. Richards, director of the manual training department of Teachers College, Columbia University, New York city, read a paper on the subject, "How Early May Handwork be Made a Part of School Work?"

The paper of Dr. Soldan was discussed by William K. Fowler, state superintendent of public instruction, Lincoln, Neb., and William M. Davidson, superintendent of city schools, Topeka, Kan.

The Committee on Nominations appointed by President Green in accordance with sec. 1 of the By-Laws was announced by the Secretary as follows:

COMMITTEE ON NOMINATIONS

Aaron Gove, of Colorado, *chairman*.

J. H. Phillips.....	Alabama	C. J. Baxter.....	New Jersey
A. Z. Peacher.....	Arkansas	S. D. Largent.....	Montana
A. J. Matthews.....	Arizona	Hiram Hadley.....	New Mexico
J. H. Francis.....	California	Howard J. Rogers.....	New York
Aaron Gove.....	Colorado	Charles D. McIver.....	North Carolina
Willis I. Twitchell.....	Connecticut	George A. McFarland.....	North Dakota
A. H. Berlin.....	Delaware	H. C. Muckley.....	Ohio
David Williams.....	Florida	A. H. Ackerman.....	Oregon
G. R. Glenn.....	Georgia	.....	Oklahoma
Miss Permeal French.....	Idaho	J. P. Welsh.....	Pennsylvania
Miss Catharine Goggin.....	Illinois	Walter B. Jacobs.....	Rhode Island
Joseph Swain.....	Indiana	.....	South Carolina
R. C. Barrett.....	Iowa	W. D. Anderson.....	South Dakota
W. M. Davidson.....	Kansas	H. C. Weber.....	Tennessee
S. L. Frogge.....	Kentucky	J. M. Fendley.....	Texas
.....	Louisiana	William J. Kerr.....	Utah
John S. Locke.....	Maine	F. A. Bagnall.....	Vermont
J. H. Van Sickle.....	Maryland	George J. Ramsey.....	Virginia
A. E. Winship.....	Massachusetts	Charles S. Tilton.....	Washington
O. G. Frederick.....	Michigan	H. B. Work.....	West Virginia
D. H. Painter.....	Minnesota	R. H. Halsey.....	Wisconsin
E. E. Bass.....	Mississippi	Miss Estelle Reel.....	Wyoming
Ben Blewett.....	Missouri	.....	Alaska
J. W. Crabtree.....	Nebraska	.....	Hawaii
.....	Nevada	.....	Porto Rico
.....	New Hampshire		

After announcements by the Secretary, the meeting adjourned.

FOURTH SESSION.—WEDNESDAY, JULY 10, 8 P. M.

The association was called to order by President Green.

Music—ladies' trio, chorus from Tennyson's "Lady of Shalott," *Wildred Bendal*.

An address on "The School and the Library: the Value of Literature in Early Education" was delivered by Frederick M. Crunden, librarian of the Public Library of St. Louis, Mo.

Music—ladies' trio, "Dance Song," *Max von Weinsiel*.

A paper on "Some of Our Mistakes" was presented by Principal George M. Grant, Queens University, Kingston, Ontario, Canada.

The meeting then adjourned.

FIFTH SESSION.—THURSDAY, JULY 11, 9:30 A. M.

The meeting was called to order by President Green.

Music—cornet solo, "The Palms," *Faure*; Mr. Harold Todd.

Prayer was offered by Rev. W. D. Maxon, D.D., rector of Christ Episcopal Church. The subject for the morning's discussion was "Economics and Education."

Addresses were delivered as follows:

"Social Science and the Curriculum," by Professor George E. Vincent, University of Chicago, Chicago, Ill.

"Economics in Public Schools," by President George Gunton, Institute of Social Economics, Union Square, New York city.

"Ideals and Methods of Economic Teaching," by Professor Frederick W. Speirs, Northeast Manual Training School, Philadelphia, Pa.

"The Teacher as a Social-Economic Power," by Dr. Reuben Post Halleck, principal of the Boys' High School, Louisville, Ky.

The report of the Committee on Necrology was presented by W. E. Crosby, of New York city, chairman, as follows:

PRELIMINARY REPORT OF THE COMMITTEE ON NECROLOGY

Members of the National Educational Association:

It falls to my lot, under peculiar circumstances, to make a report—a preliminary report—of the Committee on Necrology of the active and life members of the association who have died during the past year. A list of these members was handed to me today, as follows:

George T. Fairchild, Berea, Ky.

Caleb G. Hall, New Berlin, N. Y.

Burke Aaron Hinsdale, Ann Arbor, Mich.

S. H. Kellogg, Los Angeles, Cal.

K. B. McElroy, Eugene, Ore.

S. DeWitt Beals, Omaha, Neb.

J. M. Mehan, Des Moines, Ia.

R. V. K. Montfort, Newburgh, N. Y.

Henry Raab, Belleville, Ill.

John C. Ridge, Cincinnati, O.

Jacob T. Merrill, Cedar Rapids, Ia.

For those who mourn it is impossible to make an adequate report. I can only remind the association of its loss. Three of the deceased members appealed to me personally: George T. Fairchild, whose name was associated with that institution which prepared me for the work of teaching; Dr. Hinsdale; and John C. Ridge, of Cincinnati.

Dr. Fairchild was a life member and a life director. Caleb G. Hall was a life director. Henry Raab and S. DeWitt Beals were life members.

There is something peculiarly interesting to me in the name of John C. Ridge in that it is associated with other names prominent in the history of this association—Mason Parker, John Hancock, Andrew J. Rickoff. They were all recognized in the city of Cincinnati as Clermonters.

The members whose names I have read were soldiers in the warfare of truth against error. I will read their names again. They have fallen, and I call upon you to assist me by your memories to accord to them a just meed of recognition of their virtues, that they may be properly recorded in history. I ask those of you who knew them to aid me personally in making up this record.

Respectfully submitted,

W. E. CROSBY, *Chairman*.

After announcement by the Secretary, the meeting adjourned.

MINUTES OF THE ANNUAL BUSINESS MEETING OF THE ACTIVE MEMBERS OF THE NATIONAL EDUCATIONAL ASSOCIATION

LIGHT GUARD ARMORY

The meeting was called to order at 12 o'clock M., by President J. M. Green.

As the first order of business the report of the Treasurer was presented by L. C. Greenlee, Denver, Colo., Treasurer of the National Educational Association.

Mr. A. S. Downing, of New York, moved that the reading of the report be dispensed with, since printed copies had been distributed to the members present.

President Green asked if any member desired further information regarding the report of the Treasurer.

Treasurer Greenlee called attention to the fact that the receipts from the Charleston meeting had fully met all of the expenses of the year, leaving a small balance to the credit of that meeting; in addition, quite a large sum had been expended in paying the accrued interest and premium on bonds purchased for investment by the Board of Trustees. Attention was called to this result as particularly gratifying, since many members had not anticipated that the association could pay its annual expenses from the receipts of so small a meeting as the one at Charleston.

President Green called for the report of the Board of Trustees.

Chairman of Trustees A. G. Lane, of Chicago, reported that a detailed report had been made to the Board of Directors, and accepted and approved. No essential change had been made during the year in the permanent fund, excepting the payment of certain bonds and the reinvestment of the amount. He said, further, that certain conditions have so improved in the state of Kansas that it is now believed that ultimately the Kansas bonds owned by the association will be paid in full. The report in full will be printed in the annual volume.

It was moved and seconded that the reports of the Treasurer and of the Board of Trustees be accepted and placed on file. Carried.

President Green announced the report of the Committee on Nominations of officers for the general association as the next order of business.

Mr. Aaron Gove, chairman of the committee, introduced his report by expressing regrets that some features of the report had been published in the local papers in advance of its presentation to the association. He wished to say that the responsibility for this apparent discourtesy to the association should not be charged to either the chairman or the secretary of the committee. He believed that it was due to a lack of thoughtfulness of some members of the committee who must have given information to the reporters of the press.

REPORT OF COMMITTEE ON NOMINATIONS

DETROIT, MICH., July 11, 1901.

To the Active Members of the National Educational Association:

On behalf of the Committee on Nominations, I beg to present the following report:

<i>President</i>	WILLIAM M. BEARDSHEAR.....	Iowa
<i>Treasurer</i>	CHARLES H. KEYES.....	Connecticut
<i>First Vice-President</i>	J. M. GREEN.....	New Jersey
<i>Second Vice-President</i>	WALDE C. MARTINDALE.....	Michigan
<i>Third Vice-President</i>	R. S. BINGHAM.....	Washington
<i>Fourth Vice-President</i>	W. W. CHALMERS.....	Ohio
<i>Fifth Vice-President</i>	A. W. NORTON.....	South Dakota
<i>Sixth Vice-President</i>	J. L. HOLLOWAY.....	Arkansas
<i>Seventh Vice-President</i>	MCHEMRY RHOADS.....	Kentucky
<i>Eighth Vice-President</i>	EDMUND STANLEY.....	Kansas
<i>Ninth Vice-President</i>	HORACE S. TARBELL.....	Rhode Island
<i>Tenth Vice-President</i>	S. D. LARGENT.....	Montana
<i>Eleventh Vice-President</i>	WILLIAM M. SLATON.....	Georgia
<i>Twelfth Vice-President</i>	CALVIN M. WOODWARD.....	Missouri

BOARD OF DIRECTORS

Alabama.....	John W. Abercrombie	New Hampshire.....	J. E. Klock
Arkansas.....	George B. Cook	New Jersey.....	H. Brewster Willis
Arizona.....	F. Yale Adams	New Mexico.....	Hiram Hadley
California.....	James A. Foshay	New York.....	Augustus S. Downing
Colorado.....	H. S. Phillips	North Carolina.....	Charles D. McIver
Connecticut.....	Wilbur F. Gordy	North Dakota.....	William E. Hoover
Delaware.....	George W. Twitmyer	Ohio.....	J. M. H. Frederick
District of Columbia.....	H. M. Johnson	Oregon.....	E. D. Resaler
Florida.....	W. N. Sheats	Oklahoma.....	David R. Boyd
Georgia.....	M. L. Brittain	Pennsylvania.....	Watson Cornell
Idaho.....	Miss Permel French	Rhode Island.....	W. B. Jacobs
Illinois.....	Alfred L. Bayliss	South Carolina.....	D. B. Johnson
Indiana.....	T. A. Mott	South Dakota.....	E. E. Collins
Iowa.....	H. E. Kratz	Tennessee.....	M. M. Ross
Kansas.....	Frank R. Dyer	Texas.....	J. M. Fendley
Kentucky.....	W. H. Bartholomew	Utah.....	W. J. Kerr
Louisiana.....	Warren Easton	Vermont.....	John L. Alger
Maine.....	John S. Locke	Virginia.....	George J. Ramsey
Maryland.....	M. Bates Stephens	Washington.....	C. M. Sherman
Massachusetts.....	Frank A. Fitzpatrick	West Virginia.....	W. H. Anderson
Michigan.....	D. W. Springer	Wisconsin.....	Lorenzo D. Harvey
Minnesota.....	Charles M. Jordan	Wyoming.....	Miss Estelle Reel
Mississippi.....	James R. Preston	Alaska.....	No nomination
Montana.....	William R. Welch	Hawaii.....	No nomination
Missouri.....	W. T. Carrington	Porto Rico.....	No nomination
Nebraska.....	Carroll G. Pearse	Philippines.....	No nomination
Nevada.....	J. E. Stubbs		

Respectfully submitted for the committee.

J. H. PHILLIPS, *Secretary*.

AARON GOVE, *Chairman*.

A motion was made that the Secretary be instructed to cast the ballot of the convention for the nominees named in the report. Seconded and carried without dissent.

SECRETARY SHEPARD.—The ballot is so cast.

PRESIDENT GREEN.—The ballot being cast in favor of those put in nomination by your committee, I hereby declare the nominees named in the report of the committee duly elected as officers for the ensuing year.

I will appoint ex-President Corson and ex-President Lyte to escort President-elect Beardshear to the platform.

MR. BEARDSHEAR, being introduced, spoke as follows :

Mr. Chairman and Friends: I like that passage of Scripture where God Almighty said: "Son of man, stand upon thy feet, and I will speak unto thee." I feel that you, as an association, have bidden me stand upon my feet, look you in the face, and hear your voice. Upon my feet I look you straight in the eyes and say, not in part, but with all of me, I thank you. If any of you ever heard Salvini say, "One for all and all for one," you have been wishing with me ever afterward that you could say it as did he. If the all of you are for the all of me as the all of me is for the all of you, we shall not have any trouble in making the next National Educational Association a happy issue of what you and these worthy officers have brought to this hour. With a Salvinian greeting, "One for all and all for one," I am yours for hard work and service; and that is all you want to hear from me today.

Under the order of miscellaneous business the following resolution was offered by R. H. Jesse, of Missouri:

Resolved, That this association does, hereby, reaffirm its former declaration in favor of the establishment by the general government of a national university devoted, not to collegiate, but to true university work.

W. J. S. Bryan, of Missouri, moved that the resolution be adopted. Seconded.

DR. NICHOLAS MURRAY BUTLER, of New York.—Speaking as an old member of the association, solicitous, as we all must be, that its declarations on matters of educational concern be marked by dignity and care, and be made only after the fullest consideration of the subject on which a declaration is sought or proposed, I suggest that there is in existence an important document bearing upon this matter of a governmental university that very few of our members have yet seen. It is a report to the National Council of Education made by a committee of fifteen of our own members after three years' study of the whole subject. This report, dated May 24, 1901, has only recently been printed in a small edition for the use of the Council and the committee. Very few members, even of the Council, have yet had time to acquaint themselves with this report.

In a larger sense this report is made to our whole association, and in a few weeks it will be in the hands of each of us in our printed volume of proceedings. Inasmuch as our members, who are asked to vote upon this resolution offered by my friend, President Jesse, have not seen or received this report, and inasmuch as the gentlemen whose signatures are attached to it deservedly carry great weight with this association and with the country, I feel confident that any declaration we may make concerning a governmental university will be more worthy of our best traditions and more influential with the Congress of this country, if it is made after a study of the special report upon the subject by a committee of our own members, instead of before such study.

I should, therefore, regard present action upon President Jesse's resolution as unfortunate, and move that it be laid upon the table. Seconded.

DR. A. E. WINSHIP, of Massachusetts.—I should like to ask if the purpose of the motion of Dr. Butler is to prevent discussion on the part of this body.

DR. BUTLER.—The purpose of my motion is to postpone both consideration and action until those who are asked to vote upon this important question can have an opportunity to acquaint themselves with the latest contribution to the literature of the subject, a report by a committee of our own members.

DR. W. O. THOMPSON, of Ohio.—I wish to ask if the report referred to by Dr. Butler will ever come before this association? Has not the report been submitted to the Council, acted upon, and the committee discharged?

DR. BUTLER.—I will gladly answer President Thompson's question. In a parliamentary sense the report of this special committee, created by the Council in 1898, on a national university, has not been and will not be made to this association. The report was made to the Council, accepted by the Council, and the committee discharged. The report is, as President Thompson implies, out of parliamentary existence. My point, however, is not a parliamentary, but an educational one. It is that, knowing this report to be in existence, we should, in all fairness, give our entire voting membership a chance to study it before asking them to vote on President Jesse's resolution.

Dr. Thompson raised the point of order that, the question before the house being a motion to "lay on the table," discussion of the same was out of order.

The motion to lay on the table, being put to vote, was lost—ayes 40, nays 116.

The resolution of President Jesse was then adopted.

The following resolution was offered by Superintendent Alfred Bayliss, of Illinois, and seconded by Hiram Hadley, of New Mexico:

Resolved, That a committee of five be appointed by the chair to consider the recommendations contained in the presidential address, especially those relating to the organization of the departments of this association, and to report what changes, if any, may tend to increase the efficiency of this association, as well as any amendments to the by-laws now in force necessary to make such recommendations effective.

The resolution was adopted without dissent, and the chair appointed as the committee:

Alfred Bayliss, of Illinois.

W. M. Beardshear, of Iowa.

Nicholas Murray Butler, of New York.

W. E. Chancellor, of New Jersey.

F. Louis Soldan, of Missouri.

There being no further business, the meeting adjourned.

IRWIN SHEPARD, *Secretary*.

SIXTH SESSION.—THURSDAY, JULY 11, 8 P. M.

The meeting was called to order in Light Guard Armory by President Green.

Music—song, "Gipsy John," *Clay*; Mr. Whittier Peabody.

Miss Edna Dean Proctor, of South Framingham, Mass., addressed the convention on "Our National Floral Emblem."

Music—song, "Danny Deever," *Damrosch*; Mr. Peabody.

Hon. Cloudesley S. H. Brereton, of Melton Constable, England, delivered an address on "The Problems of Education in England."

Adjourned.

FOURTH DAY'S PROCEEDINGS

SEVENTH SESSION.—FRIDAY, JULY 12, 9:30 A. M.

The association met in Light Guard Armory, and was called to order by President Green.

Music—song, "Gipsy Maiden I," *Parker*; Miss Ruby Brownell.

Prayer was offered by Rev. D. D. McLaurin, pastor of Woodward Avenue Baptist Church.

The topic of the morning was "Higher Education."

Addresses were delivered as follows:

"The Functions of a University in a Prosperous Democracy," Charles F. Thwing, president of Western Reserve University, Cleveland, O.

"Federal and State Interest in Higher Education," Robert B. Fulton, chancellor of the University of Mississippi, University, Miss.

"Recent Growth of Public High Schools in the United States as Affecting the Attendance of Colleges," Hon. William T. Harris, Commissioner of Education of the United States.

Discussion by James Russell Parsons, Jr., secretary of the University of the State of New York, Albany, N. Y.

EIGHTH SESSION.—FRIDAY, JULY 12, 8 P. M.

The closing session of the Fortieth Annual Convention was called to order in Light Guard Armory by President Green.

The following address was presented, "The Relation of Music to Life," by Thomas Whitney Surette, staff lecturer on music for the American University Extension Society, lecturer for the University of the State of New York. Assistants in illustration were Miss Anna Otten, violinist, New York city, and Mr. Frederick L. Andries, violoncellist, Detroit, Mich.

Illustrative program:

Adagio from Trio for violin, violoncello, and piano, in G major—*Haydn*.

Allegro Moderato from Trio in B flat, Op. 97—*Beethoven*.

Scherzo from Trio in B flat, Op. 97—*Beethoven*.

Adagio from Sonata for violin and piano, Op. 78—*Brahms*.

Following the above exercises, the chairman of the Committee on Resolutions, Dr. E. Oram Lyte, of Pennsylvania, read the report of that committee, as follows:

REPORT OF THE COMMITTEE ON RESOLUTIONS

DECLARATION OF PRINCIPLES

The National Educational Association, now holding its fortieth annual meeting in the city of Detroit, and representing the teachers and friends of education throught the country, makes the following statement of principles:

1. The problem of elementary education is the most important problem with which the state must deal. The progress and happiness of a people are in direct ratio to the universality of education. A free people must be developed by free schools. History records that the stability of a nation depends upon the virtue and intelligence of the individuals composing the nation. To provide for the universal education of youth is the duty of every state in the union. All the residents of the territory under the direct control of the general government, including the Indian Territory, Alaska, and our new possessions, must receive the benefits of free education at the hands of the government. We note with satisfaction the steps that have been taken by the present administration to place the blessings of American free schools within the reach of all the children of all the peoples under our flag.

2. The Bureau of Education, under the direction of William T. Harris, Commissioner of Education, has rendered invaluable service to the cause of education thruout the United States. It is the judgment of this association that the powers of this bureau should be greatly enlarged, and that the general direction of public education in all the territory of the United States not under state control, including our new possessions, should be part of the duties of the bureau. In no other way can the general government so quickly, economically, intelligently, and safely carry the benefits of popular education to the peoples for whose education it is immediately responsible.

3. We reiterate the statement that the public school should be the center of the educational life of the community in which it is located. Especially should this be true in rural districts. Here should be found the public library for the use of all; here the educational extension courses should draw the old and the young; here may literary and social meetings be held which will tend to uplift the mental, social, and spiritual life of the people. Freed from the ravenous influence of partisan politics, untouched by the narrowness of rigid sectarianism, the public school should become the real center of the broader intellectual life, the educator of men and women beyond the school age, as well as the guide of childhood and youth.

4. The subjects that may properly be taught in elementary schools include those that bear upon the ethical, physical, and æsthetic nature of the child, as well as his purely intellectual nature. Sober, industrious, intelligent, honest, cultured citizenship should be the result of public-school training in the United States.

5. Our system of education will not be wholly free until every grade of school, from the kindergarten to and including the university, shall be open to every boy and girl of our country.

6. The liberality of men of wealth in making large donations to institutions of learning is to be strongly commended and encouraged. At the same time it should be borne in mind that popular education rests upon the people and should look to them for its chief support and control. The relation between state and local support should be so adjusted that communities will maintain a deep and abiding interest in their schools.

7. The public-school system of a state should be a unit from the kindergarten to and including the university, and all private institutions should endeavor to work in harmony with the ideals of public education so far as their special purpose will permit them. In order that public and private institutions of learning may more fully co-operate in the general work of education, the relation between these institutions should be more clearly defined than it is at the present time.

8. Legislation with respect to public education must not wait for public sentiment. It should lead public sentiment when necessary. Experience teaches that what people are compelled by law to do with respect to schools they readily learn to do without compulsion, but that they usually are slow to demand reforms which involve increased taxation. School legislation should, therefore, be under the general direction of educational experts.

9. The National Educational Association recognizes the principle that the child has

the same right to be protected by law from ignorance as from abuse, neglect, and hunger; and it therefore records with approval that many of the leading states of the union have compulsory-education laws upon their statute books.

10. While many cities have at least partly solved the problem of school supervision, in most rural communities the problem is almost wholly unsolved. Close, constant, expert supervision of schools in both city and country is imperatively demanded, not only on account of the large financial interests involved, but also on account of the supreme importance of the teacher's work and the lack of well-rounded preparation on the part of many teachers.

11. The National Educational Association watches with deep interest the solution of the problem of consolidating rural schools and transporting pupils at public expense, now attempted in many of our states. We believe that this movement will lead to the establishment of township and county high schools, and thus bring more advanced education to rural communities. We also believe that supplementary state support of rural high schools is in the highest interest of the entire state.

12. The state should support and control institutions whose object is the preparation of teachers for the public schools. Normal schools free to persons preparing to teach are an absolute necessity in a perfected system of education.

13. No one should be placed in charge of a school who has not been previously trained for the work of teaching. The plan of issuing teachers' certificates of low grade year after year is at best a makeshift and should be discontinued whenever the state is sufficiently advanced in education to warrant its discontinuance. There should be a limit to the length of time a person can serve as an apprentice in the vocation of teaching.

14. We believe that the standards for school architecture, including the proper seating, heating, lighting, ventilation, and ornamentation of school buildings, should be as definite as the standards for teaching. The law should fix the dimensions and all other requirements of school buildings, as well as the size and character of school grounds.

15. The National Educational Association declares in the preamble to its constitution that its objects are "to elevate the character and advance the interests of the profession of teaching, and to promote the cause of popular education in the United States," and we again promise that the best efforts of this association and its members shall be given to the furtherance of these objects, in the firm conviction that in no place can we serve our country better than in her schools.

E. ORAM LYTE, of Pennsylvania, *Chairman*;

JOSEPH SWAIN, of Indiana;

WM. O. THOMPSON, of Ohio;

L. E. WOLFE, of Kansas;

W. T. CARRINGTON, of Missouri;

WM. F. KING, of Iowa;

ROBERT B. FULTON, of Mississippi;

LIVINGSTON C. LORD, of Illinois;

Committee.

CHAIRMAN LYTE. — I am instructed by the committee to offer the following:

Resolved, That the thanks of the National Educational Association are due, and are hereby most cordially tendered, to the residents of this beautiful city, whose open-hearted, refined hospitality will long be remembered; to the newspapers, that have fully recorded the proceedings of the association from day to day; to the railroads and other transportation companies, whose hearty and well-directed co-operation in bringing the large membership to this city was essential to the success of this meeting; to the proprietors of the Remington Standard Typewriter, and their skilled representative, Miss

Orr, whose expert service was at the command of the officers of the association; and to the educators of the city and state, who have so successfully borne the burden of preparing for the great body of teachers and friends of education that have assembled here this week. The association desires to refer particularly to the services of Hon. James E. Scripps, chairman of the General Local Committee, and his associates; to Professor Oliver G. Frederick, chairman of the Executive Committee, and his associates; to the various department committees; to Professor W. C. Martindale, superintendent of schools of Detroit; to the teachers and members of the board of education; and to all others who have co-operated with them in making arrangements for this meeting and in carrying their carefully prepared plans to successful completion.

On motion, the resolution was adopted by a unanimous vote.

Chairman Lyte then, on behalf of the Committee on Resolutions, offered the following resolution, which was, upon motion put by the Secretary, unanimously adopted:

Resolved, That we hereby convey to the retiring President, Dr. J. M. Green, of New Jersey, and to the retiring Treasurer, Professor L. M. Greenlee, of Colorado, our cordial thanks for the eminent ability and unswerving devotion with which they have served the association.

Chairman Lyte then offered the following, which was adopted by the association, without dissent:

The National Educational Association notes with satisfaction that an international exposition is to be held in St. Louis, in 1903, commemorating the purchase of the great tract of land known as the Territory of Louisiana.

It is a matter of general information that the Congress of the United States has appropriated five millions of dollars in aid of this exposition, and has set aside an additional two hundred and fifty thousand dollars for a government building and exhibit. The people of Missouri have amended their constitution and have appropriated one million of dollars for the state's exhibit. The citizens and municipality of St. Louis have raised ten millions of dollars for the exposition. Preparations are now being rapidly pushed forward in all directions, and the success of the enterprise is fully assured.

Resolved, That the National Educational Association is in favor of uniting with the citizens of St. Louis and of the Louisiana Purchase in making an educational exhibit that will fitly commemorate the progress of the nation for the past hundred years.

President Green then spoke as follows:

When, one year ago, at Charleston, I accepted the presidency, I stated that the success of my administration would depend upon the support given me by the membership, and asked that the association do what it could in the interests of this meeting. To this request you have responded most heartily, and whatever has been our success has been due largely to that response.

The people of Detroit have proven themselves a hospitable people, and we have been made to feel at home among them. The local committees have been so well organized and so efficient that the machinery of managing our great numbers has moved without a jar. We all greatly appreciate the local contributions to our program, especially in the line of music.

I wish to acknowledge the valuable support of the Executive Committee of the association, and of the heads of the different departments, in developing the programs, as well as to express my thanks to the individuals who have taken part in these programs.

It now becomes my pleasant duty to present to you the President-elect.

Dr. W. M. Beardshear, did I not know your personal qualifications as I do, the fact that this association has unanimously chosen you to preside over it would be to me a sufficient voucher of your ability. But my acquaintance with your qualities leads me to believe that you are the right man in the right place. May God prosper you, and make you an instrument, thru the National Educational Association, of greatly promoting the education of the children of our beloved land.

In response, President-elect Beardshear said :

Mr. President and Members of the National Educational Association :

The lateness of the hour forbids words from me at this time. My deep appreciation of the great honor you have bestowed upon me has already been expressed. In any event, it is not a time for words, but for action. I bespeak the united effort of you all for a great convention in 1902.

After the benediction, President Green declared the Fortieth Annual Convention of the National Educational Association adjourned.

IRWIN SHEPARD, *Secretary.*

MINUTES OF THE MEETING OF THE BOARD OF DIRECTORS FOR 1900-1901

DETROIT, MICH.—TUESDAY, JULY 9, 1901

The annual meeting of the Board of Directors was called to order in Temple Beth El at 12 M. by President James M. Green.

The following directors responded to roll-call:

James M. Green, New Jersey; Lewis C. Greenlee, Colorado; Albert G. Lane, Illinois; William T. Harris, District of Columbia; Board of Education, Nashville, Tenn.; Nicholas Murray Butler, New York; Newton C. Dougherty, Illinois; Aaron Gove, Colorado; J. M. Greenwood, Missouri; E. Oram Lyte, Pennsylvania; F. Louis Soldan, Missouri; Teachers' Institute, Pennsylvania; John S. Locke, Maine; Frank A. Fitzpatrick, Massachusetts; Charles H. Keyes, Connecticut; A. S. Downing, New York; M. B. Stephens, Maryland; George J. Ramsey, Virginia; Miss Clem Hampton, Florida; McHenry Rhoads, Kentucky; M. M. Ross, Tennessee; William M. Slaton, Georgia; John W. Abercrombie, Alabama; J. M. Fendley, Texas; N. H. Chaney, Ohio; T. A. Mott, Indiana; J. H. Collins, Illinois; D. W. Springer, Michigan; L. D. Harvey, Wisconsin; W. M. Beardshear, Iowa; C. M. Jordan, Minnesota; W. T. Carlington, Missouri; E. E. Collins, South Dakota; C. G. Pearse, Nebraska; Frank R. Dyer, Kansas; Miss Estelle Reel, Wyoming; H. S. Phillips, Colorado; Mrs. E. R. Jackson, New Mexico; E. D. Ressler, Oregon; Irwin Shepard, Minnesota.

Number of directors present, forty.

On motion, the reading of the minutes of the previous meeting, held at Charleston, S. C., July 12, 1900, was omitted, and the minutes were approved as printed in the annual volume of proceedings of the Charleston meeting.

The annual report of the Treasurer was presented by L. C. Greenlee, of Colorado, in printed form, and copies were distributed to the directors present.

On motion, the reading of the full report was omitted, with the suggestion that questions be asked by the directors as they might desire.

In response to a question by Director Lyte, of Pennsylvania, the Treasurer explained the entries, showing that, contrary to the general expectation, the proceeds of the Charleston meeting had paid all the expenses of the year, leaving a net balance of \$316.37, which, added to the balance of \$3,796.67 received from the Los Angeles meeting, made a total balance in the treasury of \$4,113.04.

Secretary Shepard called attention to the further fact that, in addition to meeting all the usual expenses of the year, an unusual expense of nearly \$800 for accrued interest and premium on bonds purchased by the Board of Trustees had been met. While this was properly chargeable as an expense, it was in one sense an investment which would be returned to the Treasury. Were this taken into account, the real balance of receipts from the Charleston meeting over the actual expenses of the year (excluding the items referred to) was over \$1,000.

On motion of Director Greenwood, of Missouri, the Treasurer's report was received and approved, and ordered printed in the proceedings.

Director A. G. Lane, chairman of the Board of Trustees, presented the financial report of that body. Printed copies of the report were distributed to the directors.

In explanation of the report CHAIRMAN LANE said: You will note that the report indicates the amount of the permanent fund July 1, 1900, as \$88,000. There have been no additions to the permanent fund during the year. The investments, however, have changed somewhat. The investments in Kansas bonds have been reduced \$3,790 by the payment of matured bonds. Those that are indicated as delinquent became so, with one

exception, in January and July of 1897, immediately after those years of serious crop failures in Kansas. During the past two or three years there has been such an improvement in conditions in Kansas that we have hopes that all of these bonds will ultimately be paid. There have been offers made to purchase coupons that are past due, to be used in paying taxes—offers that vary from 30 per cent. to 50 per cent. of the face value of the indebtedness. From information that I have obtained I learn that lands which were regarded as unsalable a few years ago are being sold, and have advanced in value very greatly during the past three years. There have been several offers to compromise on the payment of these bonds, which have been considered by the trustees, but, in view of the information that we have obtained from friends in Kansas and from those who know the situation there, it is deemed best for us not to compromise on any of these bonds as yet. You will notice that we have secured judgment in the case of the Seward county bonds. I do not know that there is anything more to say, Mr. Chairman, except that it has been customary for the President to appoint someone to examine the securities that are in the hands of the chairman of the Board of Trustees and to attach his certificate to this report. I am ready to answer any questions that any of you may wish to ask concerning the report submitted.

DIRECTOR DYER, of Kansas.—Are there any suits for the collection of delinquent bonds in progress?

DIRECTOR LANE.—We have not thought it wise to enter into any of the various combinations that have been formed for collection of delinquent Kansas bonds. There are suits that have been instituted by some financial institutions to get judgment on other bonds of the same issues as our own, and we shall profit by their success, if they are successful.

A director inquired when and by whom these Kansas bonds were purchased.

MR. LANE.—All those Kansas bonds were purchased a number of years ago, immediately after the Chicago meeting and the years following, when the trustees had quite a sum of money to invest. These bonds were, at that time, regarded as very safe and desirable investments.

I would say, with reference to the investments which we are making at the present time, that it has been very difficult to purchase good bonds except at a very low rate of interest—on a basis of about $3\frac{1}{2}$ per cent. to 4 per cent. We have been able to secure good 5 per cent. mortgages in which the property values are double the amount of the loans. The parties who borrow the money have to pay the expense of negotiating the loan, the attorney's fee for passing upon the title, the recording, and all other expenses; hence no expense is incurred by the association in negotiating these loans.

DIRECTOR GOVE.—I notice that in all these transactions involving a large amount of legal advice I find no charge for expense. Who pays those bills?

DIRECTOR LANE.—The parties making the loans.

MR. GOVE.—I refer to expense for legal advice.

MR. LANE.—We haven't had any such expense.

MR. GOVE.—You stated just now that the trustees thought it wise to allow some others to take their cases into court, and that we should profit by their action. Now, that is doubtless based on legal advice. Where do you get it?

MR. LANE.—Well, you know that under the state laws the superintendents of public instruction are legal advisers of school officers. We have secured advice from some of these people in Kansas who are interested in the association and who are very anxious that no loss should come to the association thru these transactions.

PRESIDENT GREEN.—You have heard the report of the Board of Trustees. What is your pleasure?

Director Jordan, of Minneapolis, moved that the report be received and approved and printed in the volume of proceedings. It was so ordered.

The President announced the appointment of President Joseph Swain of the State

University of Indiana to examine the bonds and securities in the possession of the chairman of the Board of Trustees, with authority to attach to this report of the Board of Trustees the usual certificate.

Under the call of the chairman for communications, the Secretary read the following letter:

To the Directors of the National Educational Association:

GENTLEMEN: The undersigned, active members of the National Educational Association, hereby respectfully request that you will by resolution recognize and approve as an affiliated body the American Society of Religious Education. We beg to represent to you that this society is non-sectarian; that it is incorporated under the laws of the United States, with headquarters at Washington, D. C.; that it is governed by a board of twenty-one regents, with Justice Harlan, of the United States Supreme Court, as president. It is the purpose of this society to pursue advanced investigations in a scholarly way with the view to improve the methods of religious education. It desires to hold annual conferences at the same time and place with the conventions of the National Educational Association.

Believing that both bodies will be helped by an affiliated relation, the undersigned have made this request.

Respectfully,

NEWTON C. DOUGHERTY, of Illinois.

O. T. CORSON, of Ohio.

L. E. WOLFE, of Kansas.

J. W. CARR, of Indiana.

JAMES E. RUSSELL, of New York.

FRANK R. DYER, of Kansas.

R. I. HAMILTON, of Indiana.

JOSEPH SWAIN, of Indiana.

LANGDON S. THOMPSON, of New Jersey.

L. H. JONES, of Ohio.

E. O. LYTE, of Pennsylvania.

F. B. PALMER, of New York.

R. G. BOONE, of Ohio.

J. H. VAN SICKLE, of Maryland.

AARON GOVE, of Colorado.

JAMES H. BAKER, of Colorado.

J. M. GREENWOOD, of Missouri.

Z. X. SNYDER, of Colorado.

N. C. SCHAEFFER, of Pennsylvania.

Director Lyte, of Pennsylvania, offered the following resolution and moved its adoption:

Resolved, That the directors of the National Educational Association recognize the American Society of Religious Education as an affiliated body in the cause of education, and that we will gladly co-operate with the regents of said society whenever their sessions are held in the same city and at the same time as ours, and that the Secretary of the National Educational Association be authorized to extend courtesies to the secretary of said society, that the sessions may be mutually profitable.

Director Greenwood seconded the motion of Director Lyte.

Secretary Shepard stated that Rev. James E. Gilbert, the secretary and chief executive officer of the Society of Religious Education, was present and would be pleased to answer any question bearing on the communication presented.

The chairman announced that, in the absence of objection, Dr. Gilbert would be accorded the privilege of answering questions and stating the purpose of the communication.

DIRECTOR GOVE, of Colorado.—I should like to know if Jews, Roman Catholics, Christian Scientists, Mormons, etc., are represented in this society?

MR. GILBERT.—I thank you for the courtesy of permission to speak on this question. Dr. Harris and Mr. Lane know considerable of me, and they know more of the men who are associated with me. The society is composed of scholars of all denominations, but, as a matter of fact, as you would expect, the great religious bodies of the country control the society or organization. They control it, not because they wish to exclude anyone, but simply because the preponderating influence is of that character which sweeps on thruout the nation in all the religions. We have Catholics and Jews as well as members of other religious denominations. They do not, however, try to put forth their peculiar views. There has been perfect harmony from the beginning. The society is thirteen years old. General John Eaton was formerly the president, but after his return from Porto Rico his health would not permit his carrying on the work, and Justice Harlan, of the United States Supreme Court, took his place. There are nine different departments. The department which we wish to bring into alliance with the National Educational Association is that of Investigation. We believe that we may be helpful to you and that you may be greatly

helpful to us; how much more help you can be to us than we to you it is not now necessary to state. We believe that the education of this country needs the stimulus that will come from this source, and we believe our society needs the infusion of the new ideas that will come from the educators of the country. That is the reason we are seeking this alliance. I am positive that anything we may do will not in any way compromise you—we simply seek to advance those great principles that underlie the spiritual nature and are common to all religious bodies, no matter what they may be—Methodist, Presbyterian, Congregational, Episcopalian, etc. You can see at once that a great work may be done, that the discussion of these principles will have a very decided influence upon the cause of public education thruout the United States. I shall be very happy to answer any questions, but I feel some diffidence in prolonging my remarks.

DIRECTOR JORDAN.—I wish to ask whether among those who are enrolled as members of this organization are those who are known as representatives of the liberal churches—Unitarian, etc. Does not your circular—one of them at least—which you sent out, speak of the membership as coming from the so-called Evangelical churches?

MR. GILBERT.—Yes, sir, it does. But in so speaking we did not in any wise limit membership in this department, which is the Department of Investigation. Roman Catholics and Jews have co-operated with us in Washington and presented papers at our meetings, but there was no attack upon anybody at all. The society is entirely free from anything of that kind. I think that in our constitution, which I have in my hands, there is nothing that in any wise limits the membership, altho, as a matter of fact, as stated before, the great body is composed of Evangelical scholars; and yet in the thirteen years of its existence I am confident that there has been nothing uttered that would give any offense to anyone. Dr. Harris has been present at some of our meetings. He has spoken in Washington. I am confident he will bear testimony to the fact that we have never had any controversies. We are in another realm entirely.

DIRECTOR JORDAN.—I think this is too important a matter to be decided in a moment, and I move that the resolution be laid on the table for one year. That will give the members of this Board of Directors and of the association an opportunity to study the matter carefully. I think nothing can be lost, and a great deal may be gained, by postponing the consideration of this question until we all know more about it. Seconded.

DIRECTOR GREENWOOD.—What is included in the meaning of "investigation" as understood by this society?

MR. GILBERT.—By "investigation" we mean an inquiry into all the facts, phenomena, and principles of the religious life wherever exhibited, among the Mormons, Jews, Catholics, Buddhists, etc., in every part of the world. It is the religious side of man that we investigate, and we do that without any bias whatever. We are studying the nature of man. We are applying the principles which we thus discover in an effort to cultivate the religious man. The rabbi of a synagogue in Washington is one of my most intimate friends and a very earnest worker in this society. I am not anxious to press this matter now, but, as I am on my feet, I will say that on Thursday afternoon at 3 o'clock we are to hold a conference on this whole subject, to see if it is possible for us to come into closer affiliation with this association.

DIRECTOR LOCKE.—Allow me to ask if the word "Evangelical" is used in your constitution.

MR. GILBERT.—No, sir. There are some persons in our organization who are not members of any church at all.

The reading of the resolution was called for by Director Soldan.

DIRECTOR GOVE.—Most, if not everyone, are in accord with the sentiments expressed by Mr. Gilbert, and yet, after hearing the objection of Director Jordan, I am in favor of postponing action for a year. We shall be prepared a year from now to act intelligently, while now the subject is quite new and only a hurried consideration can be given.

The motion of Director Jordan was then put to vote and carried.

Director J. H. Collins, of Illinois, presented the following petition for the creation of a new department:

To the Directors of the National Educational Association:

GENTLEMEN: We, the undersigned, active members of this association, earnestly believing that the simplifying of our spelling is an educational question, and that it would greatly tend to promote the cause of popular education, respectfully request you to authorize us to organize a Simplified Spelling Department of this association.

(Signed)

DAVID FELMLEY, president State Normal School, Normal, Ill.
 JOHN W. COOK, president State Normal School, De Kalb, Ill.
 O. T. BRIGHT, county superintendent of Cook county, Chicago, Ill.
 A. R. ROBINSON, principal High and Manual Training School, Chicago, Ill.
 E. C. DELANO, assistant superintendent of schools, Chicago, Ill.
 LESLIE LEWIS, assistant superintendent of schools, Chicago, Ill.
 ALFRED KIRK, assistant superintendent of schools, Chicago, Ill.
 WM. C. PAYNE, assistant superintendent of schools, Chicago, Ill.
 W. C. DODGE, assistant superintendent of schools, Chicago, Ill.
 MISS ELLA C. SULLIVAN, Chicago, Ill.
 HENRY C. COX, principal Garfield School, Chicago, Ill.
 E. C. ROSSITER, principal Medill High School, Chicago, Ill.
 WM. J. BARTHOLF, principal Von Humboldt School, Chicago, Ill.
 DUDLEY GRANT HAYS, principal Arnold School, Chicago, Ill.
 A. H. YODER, editor *Adolescence*, Chicago, Ill.
 E. O. VAILE, editor *Intelligence*, Oak Park, Ill.
 A. V. GREENMAN, superintendent of schools, Aurora, Ill.
 W. L. STEELE, superintendent of schools, Galesburg, Ill.
 JOHN RICHESON, superintendent of schools, East St. Louis, Ill.
 F. T. OLDT, superintendent of schools, Dubuque, Ia.
 J. A. COLLINS, superintendent of schools, Springfield, Ill.
 JOSEPH CARTER, superintendent of schools, Champaign, Ill.
 LINCOLN P. GOODHUE, assistant superintendent of schools, Chicago, Ill.
 FRANCIS W. PARKER, director School of Education, University of Chicago.
 OSSIAN H. LANG, editor *School Journal*, New York city.
 J. H. VAN SICKLE, superintendent of schools, Baltimore, Md.
 C. B. GILBERT, superintendent of schools, Rochester, N. Y.
 C. C. ROUNDS, institute instructor, New York city.
 E. B. COX, superintendent of schools, Xenia, O.

Director Collins, after reading the application, moved that it be granted, and the Department of Simplified Spelling be established. Seconded by Director Mott, of Indiana.

After brief discussion, a motion to lay the motion of Director Collins on the table for a year was carried by a vote of thirteen in favor and eight against.

The Secretary reported a communication from Hon. Alfred Bayliss asking to be allowed to present personally a communication from the Round Table of State and County Superintendents of the Department of Superintendence. Permission being granted, Mr. Bayliss stated briefly that the widespread interest in the question of the consolidation of school districts in rural communities and the transportation of pupils had led to the appointment at the Chicago meeting of a committee to ask the Board of Directors of the National Educational Association to appropriate a suitable sum of money to be used by a committee appointed by the association to secure full and exact information with regard to what has been done in this direction in several states, and to publish this information for general circulation among the rural communities.

Director Carrington offered the following resolution and moved its adoption:

Resolved, That the sum of two thousand dollars, or so much thereof as may be necessary, be, and hereby is, appropriated to defray the expense of collecting information regarding the progress, means, and results of consolidating rural schools wherever the experiment has been made, and for the preparation and printing of such a report to the National Educational Association as may be useful as a bulletin of information and recommendation for general circulation among the people.

Provided, That the association shall appoint a committee for that purpose, and, *provided* further, that no member of such committee shall receive compensation for services in any form.

After brief discussion, the resolution of Director Carrington was, under the rules of the board, referred to the National Council for consideration and recommendation.

SECRETARY SHEPARD.—A communication has been received from the National Association of Elocutionists in session at Buffalo, N. Y., June 24, *ultimo*, stating that a committee had been appointed to attend the Detroit convention of the National Educational Association and to present in person a request from that body. Miss Marie L. Bruot, teacher of elocution and oratory in the Central High School, Cleveland, O., a member of that committee and an active member of the National Educational Association, is present and wishes to be heard.

President Green then invited Miss Bruot to address the board.

MISS BRUOT.—Mr. President and Members of the Board of Directors: At the convention of the National Association of Elocutionists, held in Buffalo the last week in June, Professor Robert I. Fulton, dean of the School of Oratory of the Western University of Ohio, Professor Thomas Trueblood, of the University of Michigan, and myself were appointed a committee to appear before this body to ask that some time be given to the subject of the "spoken word" upon the programs of the National Educational Association. I regret exceedingly that the chairman and the other member of this committee are not present, but I realize and believe that there is no one of your number who does not fully appreciate the value of this subject—the "spoken word"—and we trust that this honorable body will give this subject a place on your program, that the methods of teaching reading and expression may be presented and discussed. Sincerely believing that it is for the best interests of education that some time be given in the conventions of the National Educational Association to the subject of the "spoken word," I present this request, on behalf of the committee, for your consideration.

On motion of Director Gove, the Secretary was instructed to present this request of the committee of the National Association of Elocutionists to the President of the association in 1902, and to the presidents of such departments as may appropriately include the subject in their annual program.

The Secretary read the following communication from the chairman of the committee on education of the Louisiana Purchase Exposition Co., as follows:

LOUISIANA PURCHASE EXPOSITION COMPANY,
St. Louis, U. S. A., July 7, 1901.

J. M. Green, Esq., President, National Educational Association, Detroit, Mich.:

DEAR SIR: Recognizing the fact that the educational exhibits will form one of the most important features of the world's fair to be held in St. Louis in 1903, the Committee on Education, of which I have the honor to be chairman, considers it its duty to ask the National Educational Association at its annual meeting in Detroit for its full co-operation in making the educational department of the Louisiana Purchase Exposition a complete success from every aspect. Therefore the undersigned begs to suggest that the National Educational Association appoint a committee to act as an advisory board to the committee having in charge the educational exhibits at the world's fair in St. Louis, and that the state and city educational authorities act as agents of their representative states and cities in the preparation of the representation of the systems, institutions, and instrumentalities within the sphere and range of their official connection or authority.

Trusting that your body will act favorably upon these suggestions, we beg to remain,

Very truly yours,

(Signed) COMMITTEE ON EDUCATION.
JOHN SCHROERS, *Chairman*.

DIRECTOR HARRIS.—I move that this communication be received and placed on file. Seconded and carried.

DR. HARRIS.—I now offer the following resolution:

WHEREAS, The authorities of the world's fair to be held in St. Louis in 1903 in commemoration of the Louisiana Purchase have tendered an invitation to the National Educational Association to co-operate with their Committee on Education, be it

Resolved, That the President of the National Educational Association appoint a committee of twenty-one, whose duty it shall be to act as an advisory board whenever the education committee of the Louisiana Purchase Exposition submits specific questions or asks their co-operation. This advisory board shall have power to fill vacancies, and also to add further members to their number.

DIRECTOR SOLDAN.—I rise to second the motion of Director Harris, and wish to say a few words in explanation. The chairman of the committee on education of the board of directors of the Louisiana Purchase Exposition Co. called on me in St. Louis on Friday, before I left, and submitted in brief the following plan or intention on the part of the educational committee: They wish to conduct the educational department at the world's fair largely according to the ideas and wishes of the teaching profession in the country. They wish to be guided in the plans and in the collections of exhibits by the best advice that can be obtained from educators. Mr. Schroers, in discussing this idea, said that he wished the advisory board, if it should be the pleasure of the Board of Directors of the National Educational Association to appoint such a board, to aid in planning the lines according to which the educational exhibits should be selected and arranged in every detail; that, while the committee on education of the directory in St. Louis would assume all responsibility, they wish to keep in touch with this proposed committee of the National Educational Association and be guided in the general outline, as well as in the details, by their advice. The scope of the duties of the committee on education which sends this letter is indicated by the following extract from the by-law creating the committee on education:

The Committee on Education and Educational Congresses shall consist of seven members, and shall have charge of all matters pertaining to elementary and higher education in schools and other institutions of learning, whether devoted to science, literature, or art, and also of all educational congresses and conventions, and all subjects directly connected therewith.

The motion of Director Harris was then put to vote and adopted unanimously.

PRESIDENT GREEN.—This motion, as I understand it, carries with it directions that the chairman appoint a committee of twenty-one. I will, with the permission of the board, announce the committee later.

Under the call of miscellaneous business, Director Springer, of Michigan, reported that in securing advance memberships and in advancing the interests of the association in other ways he had spent \$113, altho he was aware that but \$20 was allowed each state director under the rules and customs established. He thought that this amount was quite insufficient for the director of the state in which the annual convention is held, and moved that hereafter the sum of \$100 be allowed for the expenses of the director of the state in which the annual meeting is held. Seconded by Director Ross, of Tennessee.

After brief discussion, the motion of Director Springer was put to vote and lost.

DIRECTOR NICHOLAS MURRAY BUTLER, of New York.—The members of the board will doubtless remember that in the amendments to our constitution in 1895 provision was made for the election of foreign educators as corresponding members. This action was intended to be an honorable recognition of men and women in foreign countries who had gained distinction in educational work. We have only once taken advantage of our authority by the election at the Washington meeting of ten persons as corresponding members. In connection with the exposition at Paris last year a number of persons gained what seems to be very considerable distinction, partly thru their service at the exposition and partly thru the various valuable reports made to their respective governments on educational methods and progress. I submit herewith a list of such persons, and move that they be chosen as corresponding members:

Léon Bourgeois, formerly minister of public instruction, member of the Chamber of Deputies; 5 rue Palatine, Paris, France.

Charles Bayet, director of primary instruction in the ministry of public instruction; 27 rue Gay-Lussac, Paris, France.

Élie Rabier, director of secondary education in the ministry of public instruction; 27 rue de Fleury, Paris, France.

Camille Séc, counselor of state; 65 avenue des Champs-Élysées, Paris, France.

E. P. Kovalevski, officer of the imperial ministry of public instruction, St. Petersburg, Russia.

Fabian Ware, inspector of secondary schools for the board of education, London, England; 54 Goldhurst Terrace, Hampstead, N. W., London, England.

Cloudeley S. H. Brereton, vice-president, international jury of awards for elementary education, Paris exposition; Briningham House, Norfolk county, England.

Béla de Tormay, chief of bureau in the royal ministry of agriculture, Budapest, Hungary.

Seconded and carried without dissent.

At this point the President announced the following members of the advisory board created by the resolution of Director Harris, as follows:

William T. Harris, Commissioner of Education of the United States, Washington, D. C.

Edwin A. Alderman, president of Tulane University, New Orleans, La.

Newton C. Dougherty, superintendent of schools, Peoria, Ill.

Nicholas Murray Butler, professor of philosophy and education, Columbia University, New York city.

William H. Maxwell, superintendent of schools, New York, N. Y.

James MacAlister, president of Drexel Institute, Philadelphia, Pa.

Calvin M. Woodward, director of manual training, Washington University, St. Louis, Mo.

Halsey C. Ives, director, Museum of Fine Arts, St. Louis, Mo.

Aaron Gove, superintendent of schools, District No. 1, Denver, Colo.

Andrew S. Draper, president of University of Illinois, Champaign, Ill.

William R. Harper, president of University of Chicago, Chicago, Ill.

Arthur T. Hadley, president of Yale University, New Haven, Conn.

David Starr Jordan, president of Leland Stanford Junior University, Stanford University, Cal.

J. G. Schurman, president of Cornell University, Ithaca, N. Y.

Daniel C. Gilman, president of Johns Hopkins University, Baltimore, Md.

James M. Greenwood, superintendent of schools, Kansas City, Mo.

Charles M. Jordan, superintendent of schools, Minneapolis, Minn.

Lewis H. Jones, superintendent of schools, Cleveland, O.

William T. Carrington, state superintendent of public instruction, Jefferson, Mo.

F. Louis Soldan, superintendent of schools, St. Louis, Mo.

Carroll G. Pearse, superintendent of schools, Omaha, Neb.

There being no further business, after announcements by the Secretary, the board adjourned.

IRWIN SHEPARD, *Secretary*.

MINUTES OF THE MEETING OF THE NEW BOARD OF DIRECTORS FOR 1901-1902

DETROIT, MICH.—THURSDAY, JULY 12, 4:30 P. M.

The newly elected Board of Directors was called to order in Temple Beth El at 4:30 P. M., July 12, by President-elect William M. Beardshear. The following directors responded to the roll-call:

Nicholas Murray Butler, New York; Oscar T. Corson, Ohio; Albert G. Lane, Illinois; Aaron Gove, Colorado; F. Louis Soldan, Missouri; J. M. Greenwood, Missouri; William T. Harris, District of Columbia; Mary H. Hunt, Massachusetts; E. Oram Lyte, Pennsylvania; Teachers' Institute, Pennsylvania; William M. Beardshear, Iowa; F. Yale Adams, Arizona; Wilbur F. Gordy, Connecticut; W. N. Sheats, Florida; Miss Permeal French, Idaho; Alfred Bayllas, Illinois; H. E. Kratz, Iowa; Frank R. Dyer, Kansas; W. H. Bartholomew, Kentucky; John S. Locke, Maine; D. W. Springer, Michigan; Charles M. Jordan, Minnesota; W. T. Carrington, Missouri; Carroll G. Pearse, Nebraska; H. Brewster Willis, New Jersey; Hiram Hadley, New Mexico; Augustus S. Downing, New York; J. M. H. Frederick, Ohio; E. D. Reasler, Oregon; Watson Cornell, Pennsylvania; W. B. Jacobs, Rhode Island; George J. Ramsey, Virginia; C. M. Sherman, Washington; L. D. Harvey, Wisconsin; Miss Estelle Reel, Wyoming; Charles H. Keyes, Connecticut; Irwin Shepard, Minnesota.

Present, thirty-seven members.

The minutes of the meeting of the Board of Directors held on July 9 were read and approved.

On motion of Director Greenwood, the chair appointed the following committee to nominate members for the National Council: Directors F. Louis Soldan, of Missouri; Charles M. Jordan, of Minnesota; and Nicholas Murray Butler, of New York.

Mr. J. H. Francis, of California, by permission of the President, stated to the board that Superintendent J. A. Foshay, director-elect for California, was not present, and, as that state desired to be represented in the meeting of the Board of Directors, he requested that permission be granted to him to represent Mr. Foshay as a proxy.

Director Greenwood moved that Mr. Francis be permitted to represent Mr. Foshay by proxy in this meeting, stating that he considered it only fair that California be allowed the privilege of voting representation in the Board of Directors. Seconded.

Director Gove, of Colorado, questioned the advisability of this motion as being an innovation on the custom and precedents of the board.

Director Pearse, of Nebraska, called attention to the impropriety of any action by which the Board of Directors should change the action of the electors of the National Educational Association in transferring the right to vote from the duly elected director to a proxy, and especially to a proxy not appointed by the director himself, thus arbitrarily changing the membership of the board.

In response to an inquiry, the Secretary stated that this question had frequently been before the board for action, and that the board had always refused to allow proxies, even when designated by the absent members.

The motion of Director Greenwood was then rejected by a decisive vote.

President Beardshear announced as the next order of business the election of a member of the Board of Trustees to succeed F. Louis Soldan, of Missouri, whose term of office expires with this meeting.

A motion was made and seconded that Mr. Soldan be nominated to succeed himself as a member of the Board of Trustees.

Director Soldan stated that, while he was willing in all things to follow the directions of the board, he much preferred that some other member from among the large number so competent for this service should be elected to the vacancy.

Director Pearce, of Nebraska, moved that the Secretary be instructed to cast the ballot of the board for the election of Director F. Louis Soldan, of Missouri, as member of the Board of Trustees for four years, to succeed himself. The motion was seconded and carried without dissent.

The Secretary having reported that the ballot had been cast in accordance with instructions, President Beardshear declared Director Soldan elected as a member of the Board of Trustees.

On motion of Director Ramsey, of Virginia, Director William T. Harris was elected to succeed himself as a member of the Executive Committee for the term of one year.

President Beardshear announced as the next order of business the receiving of invitations for the next annual convention.

Director E. D. Ressler, assistant professor of education in the University of Oregon, presented an invitation from the cities of the north Pacific coast, stating that these cities had united in an invitation and an earnest request that the next convention be held at that one of the cities of the north Pacific coast which the Executive Committee should select as the best suited for entertaining the association.

This invitation was seconded and supported in a brief address by Director C. M. Sherman, president of the Puget Sound Schoolmasters' Club.

Director Charles M. Jordan, superintendent of schools of Minneapolis, presented an invitation from the city of Minneapolis for the next meeting, calling attention to the fact that the Board of Directors, at the Buffalo meeting, had voted in favor of holding the convention in 1897 in Minneapolis, but, owing to the fact that another convention had previously been located in that city on the same dates chosen by the National Educational Association, the Executive Committee deemed it advisable to hold the convention in the city of Milwaukee instead. He now wished to renew the invitation of the city of Minneapolis for the year 1902, with assurances that all the usual facilities for holding the convention would be supplied.

Director Springer, of Michigan, moved that the matter of the location of the next annual convention be referred without vote by the directors to the Executive Committee with power to act. This motion was seconded and passed without dissent.

Director Greenwood, chairman of the Committee on Investigations and Appropriations of the National Council, presented the following resolution:

Resolved, That the sum of two hundred dollars, or so much thereof as may be necessary, be, and hereby is, appropriated to defray the necessary clerical expenses of the committee named by a round table of the Department of Superintendence to collect information regarding the progress, means, and results of consolidating rural schools; provided, that all bills against this appropriation shall be certified as correct by the chairman of the committee aforesaid.

(Signed) { J. M. GREENWOOD, *Chairman*.
NICHOLAS MURRAY BUTLER.
AUGUSTUS S. DOWNING.
L. D. HARVEY.

Director Greenwood stated that the resolution had been handed to his committee, and had met with its approval and concurrence, tho it had not yet been acted upon by the National Council, and could not be acted upon by that body before its next meeting, on Friday afternoon, July 12. He further explained that, unless action was taken by the Board of Directors at this meeting, in advance of recommendation by the Council, the result would be that the matter would lie over for an entire year before it could be formally acted upon by this body. This would be a disappointment to the committee of state superintendents who desired to proceed at once with the formulation of the proposed report.

On motion, the resolution was approved, subject to concurrent action of the National Council.¹

The Committee on Nomination of members of the National Council presented the following report:

Members of the Board of Directors of the National Educational Association:

Your committee finds the following vacancies in the National Council, viz.: By reason of expiration of term: James M. Green, Trenton, N. J.; Augustus S. Downing, New York, N. Y.; A. R. Taylor, Decatur, Ill.; Charles D. McIver, Greensboro, N. C.; R. B. Fulton, University, Miss.

By reason of absence from two consecutive meetings: Frank Rigler, Portland, Ore., whose term expires in 1904.

Your committee, deeming it a wise precedent to continue those members of the Council whose services have been especially valuable, nominate for reappointment for the term of six years the five members whose terms expire as noted above.

To succeed Frank Rigler, of Oregon, they nominate R. H. Halsey, of Wisconsin, for the term ending 1904.

On motion, the report of the committee was received and adopted, and the nominees declared duly elected as members of the Council.

Upon motion, after brief discussion, an appropriation of \$700, or so much thereof as may be necessary, was made to meet the expenses of the meeting of the Department of Superintendence in 1902 at Chicago, Ill.

On motion of Dr. Harris, the following-named educators from South America and Central America, several of whom were in attendance on the sessions of the present convention, were elected corresponding members of the association:

From Argentine Republic—Dr. J. B. Zubiaur.

From United States of Brazil—A. Fontoura Xavier, Professor Alcides Medrado.

From Republic of Chile—Julio Peres Canto, Carlos Silva Cruz, Guillermo Freudenburg.

From Republic of Costa Rica—Senor Don Joaquin Bernardo Calve.

From Republic of Guatemala—Dr. Joaquin Yela.

From Republic of Nicaragua—Don Alejandro Bermudez, Don Ramiro Gamex.

On motion of Director Butler, of New York, the following resolution was passed with dissent:

Resolved, That the sum of one hundred dollars, or so much thereof as may be necessary, be appropriated to pay the expenses for printing, clerical services, etc., incurred by the Committee of Fifteen appointed under authority of the resolution of the National Council of Education passed July 11, 1898, to inquire into the whole question of a national university; provided that all bills against this appropriation shall be certified as correct by the chairman of the committee aforesaid.

There being no further business before the board, the meeting adjourned.

IRWIN SHEPARD, *Secretary*.

¹ The National Council at its meeting July 12 failed to recommend the granting of the appropriation provided for in the resolution; hence the action of the Board of Directors on this resolution is void.—EDITOR.

FIRST ANNUAL REPORT OF THE PERMANENT SECRETARY TO THE BOARD OF TRUSTEES

SECRETARY'S OFFICE, WINONA, MINN., October 1, 1901.

To the Board of Trustees of the National Educational Association:

GENTLEMEN: In accordance with your recent action requesting a report of the business of the Secretary's office, I beg leave to submit the following:

The inference is that this report is expected to cover, especially, the time since I was elected Secretary by your honorable body. The work since 1893, when I was first elected Secretary by the association, is so interwoven with the work since election as permanent Secretary in 1897 that I have deemed it advisable to extend the report, in some details, over both periods.

No directions having been given as to the matter to be included in this report, I have chosen such data as seem to me most interesting and valuable as information to your board and to the active members of the association.

When I came into the office of Secretary, in 1893, no records or documents of any kind were on file, excepting a few letters of recent date and a book of minutes of the meetings of the Executive Committee.

From 1893 to 1895 the most important work was editing and distributing the annual volume of proceedings. A plan of distribution was established, and since continued, by which every volume sent out can, if necessary, be traced and delivery shown, or, if not delivered, returned to this office. Special attention was given in 1893 and 1894, with considerable success, to the sale of volumes of proceedings of the International Congresses of Education and former publications.

THE ACTIVE MEMBERSHIP

In 1895, by amendment to the constitution at the Denver meeting, the class of active members was created. From that time an annual salary of \$1,500 was allowed the Secretary as compensation for a part of his time, with provisions for the employment of a stenographer and clerk for the Secretary's office; a salary of \$750 was also allowed the Treasurer as compensation for the performance of the duties of his office and for clerical assistance. The conduct of the registration department at the time of the annual meeting and the collection of membership revenue from the various railroad companies were included in the duties of the Treasurer until the time of the election of a permanent Secretary, when these duties were transferred to the Secretary, and the Treasurer's salary was discontinued.

The records of over fifty thousand annual memberships, printed in the volume of proceedings extending from the Madison meeting in 1884 to the Denver meeting in 1895, were, in the year following the Denver meeting, analyzed and classified, and every person who was eligible and who had been a member more than one year was invited to join the active class under the provisions of the amended constitution.

For two years following the Denver meeting no enrollment fee was charged. At the Milwaukee meeting the constitution was amended, requiring an enrollment fee of \$2 in addition to annual dues, making the first payment of an active member \$4. It has been the policy to date active membership from the earliest year of continuous annual membership, and to allow lapses in annual membership to be recovered by payment of the omitted dues. The following table shows the growth of the active membership from 1895 to date:

TABLE SHOWING ACTIVE MEMBERSHIP ENROLLMENT SINCE 1895

Year	Meeting	Additions	Loss by death	Loss by withdrawal	Total loss	Net gain	Total membership
1895-96.....	Buffalo.....	1,464	..	...	...	...	1,464
1896-97.....	Milwaukee.....	467	18	56	74	393	1,857
1897-98 ¹	Washington.....	290	20	175	195	95	1,952
1898-99.....	Los Angeles.....	399	26	121	147	252	2,204
1899-1900.....	Charleston.....	308	32	159	191	117	2,321
1900-1901 ²	Detroit.....	585	15	71	86	499	2,820

The number of active members present at the Los Angeles meeting in 1899 was 530, or 24 per cent. of the active membership; at the Charleston meeting in 1900, 546, or 23.5 per cent. of the active membership; at Detroit in 1901, 1,173, or 41.6 per cent. of the active membership.

At the Los Angeles meeting the active membership constituted less than 5 per cent. of the total membership enrolled, both active and associate; at the Charleston meeting, about 19 per cent.; and at Detroit, about 20 per cent. of the total enrollment. Under these circumstances it will be seen that the collection of the dues of active members not in attendance at the annual convention is an important feature of the work of the Secretary's office.

The annual withdrawals from membership, shown by the above table to be considerable, are mainly confined to the less permanent element in the profession and to those who were enrolled before an enrollment fee was charged. It rarely occurs that a member in a permanent position, or in high professional standing, discontinues his membership. For this reason the active membership is annually growing stronger and more representative, as well as larger.

A noteworthy feature of the active membership is the number and character of the educational institutions which have enrolled—nearly all within the past three years. Most of these institutions have purchased sets of the published proceedings and reports, and have enrolled for the purpose of securing future reports as they are published. The enrollment of institutions at this date includes the following:

Universities and colleges	79
Normal schools	43
Public libraries	49
Boards of education	12
Other educational institutions	16
Total	199

It is interesting to note that recently the following libraries enrolled as active members and purchased certain back volumes of the proceedings:

Cardiff Free Public Libraries, Cardiff, Wales.
 Imperial Library of Japan, Tokyo, Japan.
 Library of Congress of Chile, Santiago, Chile.

Even among individuals the idea is gaining ground that it is profitable for those teachers who cannot attend the annual meeting regularly to become active members, that they may secure the published proceedings. The value of the active membership list as a reliable educational directory influences many to seek representation in it, but, without doubt, the leading motive is the desire to be permanently and actively identified with the association and its work.

SPECIAL COMMITTEE REPORTS

With the Saratoga meeting in 1892 a new movement was inaugurated by the association in the appointment of the special Committee of Ten to investigate and report on courses of study for secondary schools. This report was made in 1893, the year in which

¹ From this date the enrollment fee of \$2 was required.

² The record for this year is to date. Some changes will occur before the record is closed. See statistical table at the end of the volume.

no session of the association was held. The report was published and distributed extensively by the United States Bureau of Education, but unfortunately was never included in any published volume of proceedings.

In 1893 the Committee of Fifteen on Elementary Education was appointed. The report was made to the Department of Superintendence in 1895, and published in the volume of proceedings of that year.

In 1895 the Committee of Twelve on Rural Schools was appointed by the Council. Their report was made to the Council in 1897, and published in the volume of proceedings of the Milwaukee meeting. The Committee on College-Entrance Requirements was appointed in 1895; on Normal Schools, in 1895; and on the Relations of Public Libraries to Public Schools, in 1898. These three committees reported at the Los Angeles meeting in 1899, and the reports are all included in the Los Angeles volume.

The following is a table showing approximately the distribution to date of the reprints of the several special committee reports:

Report of	GRATUITOUS DISTRIBUTION BY			SOLD BY		Total distribution
	U. S. Bureau of Education	Committee	State editions	Educational publishers	Secretary	
Committee of Ten.....	30,000	unknown	.....	10,538	.....	40,538
Committee of Fifteen.....	"	18,816	.....	18,816
Committee of Twelve on Rural Schools.....	1,000	60,000	.....	4,500	65,500
Committee on College-Entrance Requirements.....	2,500	.....	.....	2,500	5,000
Committee on Normal Schools.....	1,200	.....	.....	1,200	2,400
Committee on Public Libraries.....	1,000	.....	.....	2,100	3,100

The plates of the report of the Committee of Twelve have been loaned without charge to several state superintendents for use in publishing state editions for free distribution, which have aggregated sixty thousand copies. In addition to the above table, the reports have received the circulation of the volumes of proceedings in which they were published; parts of each report have appeared in the reports of the United States Commissioner of Education and of several state superintendents of public instruction; and extensive reprint editions have been made by various publishing houses of several of the reports which were not copyrighted.

The reports of the Committee of Ten and of the Committee of Fifteen were copyrighted and a contract made with the American Book Co. for their publication and sale at 30 cents per copy, the company to pay the association a royalty of 5 cents per copy on all copies sold. These sales have been as follows:

REPORT OF ROYALTY SALES OF REPORTS OF COMMITTEE OF TEN AND COMMITTEE OF FIFTEEN BY AMERICAN BOOK CO.

Year	COPIES SOLD			Amount of royalty
	Report of Committee of Ten	Report of Committee of Fifteen	Total	
1894.....	2,125	.....	2,125	\$106.25
1895.....	3,167	1,822	4,989	249.45
1896.....	1,332	1,133	2,465	123.25
1897.....	1,116	823	1,939	96.95
1898.....	954	534	1,488	74.40
1899.....	872	527	1,399	69.95
1900.....	972	677	1,649	82.45
Totals.....	10,538	5,516	16,054	\$802.70

It is not probable that the same number of copies could have been sold within the same time from the Secretary's office, even at actual cost of publication. The facilities for advertising and selling these reports possessed by an educational publishing company raises the question whether it would not be advisable to make, for all reports, arrangements similar to that which has proved so successful in the case of the two committee reports referred to in the above table.

OMISSIONS FROM THE VOLUMES OF PROCEEDINGS

It should be a matter of record that the volumes of proceedings of the association do not contain all of the proceedings of the Department of Superintendence since that organization became a department of the association in 1870. In the early years the United States Bureau of Education usually published and distributed the proceedings of that department. When this was done, they were not, for several years, reprinted or included in the annual volume.

The following is a list of the proceedings so published not included in any publication of the association :

Year	Time and place of meeting	Where published	Pages
1874.....	January, Washington	Bureau of Education, Circular No. 1, 1874	1- 77
1875.....	January, Washington	Bureau of Education, Circular No. 1, 1875	1-122
1877.....	December, Washington	Bureau of Education, Circular No. 2, 1879	Appendix
1879.....	February, Washington	Bureau of Education, Circular No. 2, 1879	...
1886.....	February, Washington	Bureau of Education, Circular No. 2, 1886	1-169
1887.....	March, Washington	Bureau of Education, Circular No. 3, 1887	1-200
1888.....	February, Washington	Bureau of Education, Circular No. 6, 1888	1-165
1889.....	March, Washington	Bureau of Education, Circular No. 2, 1889	1-300

From 1880 to 1884, inclusive, the proceedings were printed by the Bureau of Education, and reprinted in the annual volume of proceedings.

In the years 1876 and 1877, also from 1879 to 1889, inclusive, a second meeting was held at the time and place of the annual convention. These meetings were usually business meetings—tho occasionally papers were presented—and the minutes and papers were published in the annual volume.

Since 1889 but one meeting has been held each year, and the proceedings have been printed only in the volume of proceedings.

The omissions referred to above had not been discovered at the time the *Subject Index* was compiled and published. Consequently the subjects of the reports of the Department of Superintendence published only by the United States Bureau of Education are not included in the index volume. This has quite seriously disappointed many whose files of proceedings include the omitted reports.

SALES OF BACK VOLUMES AND REPORTS

In view of the constant demand for full sets of volumes of proceedings, it is a matter of regret that many volumes are out of print and cannot be supplied, as follows: all volumes from 1857 to 1872, inclusive, excepting 1865, of which there are but fifteen copies, and 1866, of which there are but seventeen copies in stock. The supply of volumes for 1883 and 1885 is also exhausted, and for 1882 there are but eighteen volumes remaining.

CASH RECEIPTS

The receipts from sales of volumes and reports from the Secretary's office since 1895, as well as the receipts for active membership dues not paid at the time of the annual meeting, have been as follows:

TABLE OF CASH RECEIPTS AT THE SECRETARY'S OFFICE SINCE 1895

Year	Active membership dues not paid at annual meeting	Sales of back volumes	Sales of committee reports, etc.	Total
1895-96.....	\$1,262.35	\$ 193.90	.....	\$1,456.25
1896-97.....	1,066.25	37.25	.....	1,103.50
1897-98.....	1,604.83	1,375.63	\$ 453.76	3,433.62
1898-99.....	2,398.07	406.70	110.89	2,914.66
1899-1900.....	3,436.26	1,741.50	677.35	5,855.11
1900-1901.....	3,757.85	852.65	476.69	5,086.19
Totals.....	\$13,525.01	\$4,007.63	\$1,729.69	\$19,262.33

Revenue from these sources was practically unknown before the organization of the active membership, which furnishes annually a large paying constituency of those who do not attend the annual meeting, and who under the former arrangements paid no dues.

THE ANNUAL VOLUME

The annual volume of proceedings embodies the results of the work of the association from year to year, and is therefore its most important concern. It has been the aim of the successive publication committees to confine it to a single volume of 1,000 pages. This limit has, in recent years, been exceeded, in order to include the reports of special committees, and to provide for the eight new departments which have been added since 1892.

Every effort has been made in editing the volume to exclude useless material, to secure the abridgment of papers and discussions of excessive length, and to limit the matter as far as consistent with a fair representation of the valuable papers and discussions presented in the general sessions and the eighteen departments now organized. The largest volume yet issued is the Los Angeles volume, of 1,258 pages, which contains, in addition to the usual matter, three special committee reports covering 277 pages. Excluding these special reports, the Los Angeles volume numbers 981 pages, while the St. Paul volume in 1890, with eight departments less to provide for, contains 929 pages. The Charleston volume of 1900 numbers 809 pages, which is the smallest volume since the Nashville meeting in 1889.

The most effective measure in restricting the size of the volume has been the editing of the programs in advance of the annual convention, and securing desirable limitations as to number and length of the individual papers. There is still room for improvement in this direction, as was so forcibly pointed out by President Green in his presidential address at Detroit. The departments which have been added from time to time overlap each other, because some of them represent horizontal and others vertical sections of educational work.

It is the theory that the President of the association shall have general oversight of the department programs, but there is no definite legislation which gives the President authority in this matter. Since the President of the general association and the presidents of the several departments change each year, there has not been uniformity of administration in this respect. I would respectfully suggest that more definite legislation on this subject be enacted; that provision be made for a meeting of the President-elect with the newly elected department officers, to be held before the close of the convention at which they are elected, for conference and for determining the general policy of administration; that a subsequent meeting of the President with the department presidents be held at some central point about January 1, at which time the department presidents should be expected to present tentative outlines of proposed programs for mutual criticism and suggestion, in order that the field and the topics to be covered by each should be determined and understood by all, and that subsequent departures from the respective lines

agreed upon should be made only on the approval of the President of the association. An examination of any convention program will readily disclose the importance of such advance regulation of department plans.

The association should, doubtless, pay the expenses of such a meeting, but, I believe, no more profitable expenditure could be made, since the results would certainly tend to the improvement of the programs, the elimination of conflicts and repetitions, and the probable restriction of the matter to be printed.

The cost of printing the volume has been steadily decreased, notwithstanding the occasional increase in size and the use to a larger extent of smaller type, with the consequent increased cost of composition. The recent increase in the number of volumes printed has helped to decrease the average cost per volume.

For several years previous to 1894 the volume was printed in New York city, by J. B. Little & Co.; the volumes for 1894 and 1895 were printed by the Pioneer Press Co. of St. Paul, Minn.; the volumes for 1896, 1897, 1898, 1899, and 1900, by the University of Chicago Press.

TABLE SHOWING COST OF PUBLICATION OF VOLUME OF PROCEEDINGS SINCE 1893

Year	Number of copies	Number of pages	Total cost	Cost per copy
1893	2,725	1,007	\$4,616.75 ¹	\$1.69
1894	3,000	1,074 ³	3,920.00	1.31
1895	5,300	1,102 ⁴	4,947.44	.93
1896	5,500	1,088	4,120.74	.75
1897	5,200	1,132 ⁵	4,079.63	.78
1898	5,500	1,139	4,268.41	.78
1899	7,500	1,258 ⁶	5,514.98	.76
1900	4,000	809	3,036.15 ²	.74

ANALYSIS OF TREASURER'S REPORTS

A recent tabulation and analysis of the receipts and expenditures shows that the Denver meeting in 1895 introduced a new era in the financial history of the association, and that the receipts and additions to the permanent fund for the five years from 1895 to 1899, inclusive, were almost identical with the eleven years from 1884 to 1894, inclusive, as follows:

COMPARATIVE SUMMARY OF FINANCIAL STATISTICS COMPILED FROM THE TREASURER'S REPORTS

	For eleven years, 1884-94, inclusive	For five years, 1895-1899, inclusive
Total number of members	45,669	51,669
Average annual membership	4,152	10,334
Total receipts	\$119,132.87	\$131,537.49
Average annual receipts	10,830.26	26,307.49
Total expenses	\$74,324.27	\$84,783.01
Average annual expenses	6,756.75	16,956.60
Relation of expenses to receipts	62.4 per cent.	64.4 per cent.
Total additions to permanent fund	\$45,000.00	\$43,000.00
Average annual addition to permanent fund ..	4,090.91	8,600.00

¹ *Proceedings of International Congresses of Education*; cost of plates for volume included.

² Owing to the advance in cost of paper and labor, the contract price was advanced 12 per cent. over that of the four previous years.

³ Includes proceedings of Department of Superintendence for years 1893 and 1894.

⁴ Includes report of Committee of Fifteen, 110 pages.

⁵ Includes report of Committee of Twelve, 108 pages.

⁶ Includes reports of Committee on College-Entrance Requirements, Committee on Normal Schools, and Committee on Public Libraries, 277 pages.

It is worthy of note that during the latter five years certain salaries have been paid; the expenses of state managers and department officers have been more liberally provided for; several committees of investigation have received appropriations for expenses; their reports have been published and distributed; and in many ways the work of the association has been enlarged and its total annual expenses largely increased, tho it appears that, owing to restriction of expenses in other directions, the proportion of expenses to receipts has increased only 2 per cent.

In the above recapitulation the receipts and expenses for the year of the Charleston meeting have not been included, on account of the exceptional circumstances, which are not likely to recur. It is gratifying to note that even in the year of the Charleston meeting the net revenue exceeded the expenses by several hundred dollars. This was made possible by the \$3,883.03 revenue from the invested fund, with the \$5,089.19 cash collections of the Secretary's office, which together constitute a practically fixed revenue of nearly \$9,000 not dependent upon receipts from the annual meeting.

RELATIONS WITH TRANSPORTATION COMPANIES

Among the most important responsibilities of the office are the negotiations with transportation companies for rates and ticket conditions for the annual conventions, and the settlement with these companies for the membership revenue collected by them.

The plan of incorporating the membership coupon in the railroad ticket, and the membership fee in the purchase price of the ticket, with an agreement to report the same to the Treasurer of the association, has obtained since adopted at the Chicago meeting in 1887. This plan was for a time strenuously opposed by certain lines, especially in the East, and has never been officially approved by the New England Passenger Association. Opposition has now quite generally ceased, and since 1896 the roads have, with unimportant exceptions, gone farther and settled with the association on the "basis of sales," rather than on the former "basis of collections." This secures to the association the membership revenue on all tickets sold, whether the coupons are collected at the convention registration desks or not.

The friendliness and confidence of the transportation lines have been won by an established and consistent policy of fair dealing and the recognition of the rights of the roads to protection against ticket scalping and other convention abuses, such as "official routes," which are designed to divert business from the lines to which it belongs to certain routes chosen by convention officials.

The work of the association in its public service to education appeals strongly to railroad officials to the extent that they now, almost without exception, willingly grant the usual concessions of rates and ticket conditions, and join in protecting the interests of the association by collecting and reporting, thru the terminal lines, to the Treasurer of the association the membership revenue by the same methods and forms which they use in reporting the divisions of ticket revenue to connecting lines. These reports are in detail, giving place of sale with form and number of each ticket. They are checked out at the Secretary's office from month to month, as received, and claim for revenue made on all coupons not included in the final reports. No line has, at least within recent years, refused to honor any rightful claim for membership revenue; nor has any disposition been shown, except in rare instances, to withhold revenue until claim is made.

THE OFFICE

The office of the Secretary has been provided for since 1895, without charge to the association, in rooms of my residence at Winona. The necessary desks, filing cases, and other appliances have so far overrun the available space that the question of larger and better-equipped rooms will soon claim attention.

The work of the office has increased very rapidly during the past three or four years. The correspondence has reached a magnitude difficult to be handled with the aid of a

single clerk. In this connection it may be appropriate to call attention to the fact that the postage account of the office last year was \$749.65, while the expense for all clerical services was but \$563.70—a proportion which, I believe, does not usually obtain in correspondence offices.

The outgoing mail last year amounted approximately to 10,000 pieces of letter mail and 50,000 pieces of third-class matter—bulletins, pamphlets, and reports. Letter mail received approximated 10,000 pieces, of which 2,500 contained money remittances.

THE EXECUTIVE COMMITTEE BULLETIN

Since the discontinuance, in 1896, of the *Official Bulletin* as a publication of the city inviting the association, the work of issuing the bulletins of the Executive Committee, containing all information as to railroad rates, ticket conditions, programs, and other details of arrangements for the annual convention, has devolved upon the Secretary. At first these bulletins were issued only to the educational press and the active members; but the demand has so increased that last year 20,000 copies of *Bulletin No. 1* and 30,000 copies of *Bulletin No. 2* were issued. About two-thirds of these were sent to individual addresses, and the balance to state directors and managers, and to school superintendents who requested them for personal distribution.

THE EDUCATIONAL PRESS

The educational journals have continued and extended their support of the association in all its various lines of work. Special circulars of information are sent to them monthly, and are quite generally quoted from or reprinted entire. Several journals issue annually an association number, in which, in addition to illustrated articles on the place of meeting, the *Executive Committee Bulletin*, containing convention arrangements and programs, is printed entire from plates furnished from this office. In this manner the circulation of the most important bulletin is extended by forty or fifty thousand copies without cost to the association, except for the plates. The value of this gratuitous support of the educational press cannot be overestimated, and is highly appreciated by all members, and especially by the executive officers of the association.

This report has already overrun the limits intended. There are other phases of the work of the office that might be mentioned; but, as reports are to be made annually hereafter, I trust that the statements included in the foregoing will appear reasonably full and satisfactory for the initial report.

Respectfully submitted,

(Signed) IRWIN SHEPARD, *Secretary*.

GENERAL SESSIONS OF THE ASSOCIATION

ADDRESSES OF WELCOME

HON. A. T. BLISS, GOVERNOR OF MICHIGAN

Mr. President and Members of the National Educational Association, Ladies and Gentlemen:

It is with both pleasure and pride that I welcome to the metropolis of Michigan today this great association, and congratulate you upon the auspicious opening of this conference so important to the cause of education.

Michigan today throws open the doors of her very best front parlor, the beautiful city of Detroit, with just as complete satisfaction as is possible on the part of any New England housewife.

I am ready to believe you will all agree with me that your association has never met with a warmer welcome anywhere in this union of ours than in Detroit, and if you are not convinced of it by this time, you will be when you have heard all the welcoming speeches.

There is no language spoken on earth wherein the word "welcome" has a more pleasant sound than in English, and in the truest and best sense of the word, speaking as the chief executive of this grand old peninsular state, I greet you with a welcome to this city and to the commonwealth.

It is a fact that wherever this association has met, large benefits have been reaped thru increased interest in and for the teaching profession, to the great good of the vast army of children who year by year seek the schoolroom. Here in Michigan, where the schools are closer to the hearts of the people than almost anything else in the world, something more than passing attention will be given to the doings and sayings of the cultured men and women who will speak on educational themes from the platforms of the general sessions and the eighteen departments into which the association is divided.

The people of Michigan are very proud of the work along educational lines carried on in their state, annually expending in its support a sum estimated at from eight to ten millions of dollars. The "little red school-house," intrenched behind a wisely devised primary-school fund, is as sacred to the people as the glorious star-spangled banner waving over it.

I have no desire to weary you with figures showing the vastness of the effort put forth in this state in behalf of education. Instead I call to the minds of those of you who have journeyed over the commonwealth how

from the bustling city to the quiet village the schoolhouse has always been the most conspicuous structure. Everywhere the school tax is paid without grumbling, and it is not the lightest of our burdens. The people are proud of the rank of their state, of her material progress and her prosperity, her wonderful natural resources—proud of the past and gloriously confident of the future; but above all are they proud of her educational system, from the foundations of the district and graded schools to her world-renowned university.

The demand of the age is for a practical education, and I am glad to note that Michigan educators are bending all their energies in that direction. The trained men and women who are coming annually into the working world are potent factors in the increased progress we are making. This is the best age in all the world's history for young men and women with a practical education. The disciplined mind rules the world today, and it is your proud distinction, men and women of this association, that into your hands is committed the training of this mighty force.

You come among us with blessings to bestow, and we are grateful for your presence. Our hands are extended in welcome, and as a patriotic people greet their armed defenders, so do we offer you our greeting.

Fully realizing the honor of entertaining this vast assembly of the teachers of this country for the second time in her history, Michigan bids me again to welcome you.

HON. DELOS FALL, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION

Mr. President, Fellow-Teachers, Ladies and Gentlemen:

The state has been ably and eloquently represented by her chief magistrate, the governor, and you have been told of the glories of our commonwealth from the standpoint of its material wealth, its business life, and its commercial prosperity. All these are of great significance, and entirely worthy and proper to be mentioned in this presence, but at the same time all who are thoughtful concerning the highest and best interests of the state will admit that it is my happy privilege to represent that which constitutes the real pride and hope, the glory and perpetuity, of the nation, namely, the people themselves, their intelligence, morality, and virtue. Still more significant is the fact that I am to voice a welcome from a class whose life-work is not simply to estimate and utilize the forces of society as they now exist, but rather, in the light of the many apparent existing imperfections in the world at large, theirs is the duty to mold the rising generation so that, when these who are now pupils come upon the stage of action, the general level of society, the character and stability of its citizens, will be raised.

I therefore bring to you greetings and extend a welcome from 16,000 teachers and 720,000 pupils who have been going in and out from

Michigan schools during the days of the past year. Over eight thousand of the rural schools, "the people's universities," are closed this week, for no Michigan teacher is thinking of anything at this time but that of assembling in this beautiful "City of the Straits" to welcome his professional brothers and sisters from the other sections of our union. They are here today, wearing the blue and white ribbons of this great association, in glad expectation of the inspiration and help they will gain by a contact, if only a brief one, with the great teachers of our nation. They feel that, if only they can assimilate into their lives the purpose and spirit, the method and the personality, of our great educational leaders; if they can even learn clearly and intelligently to pronounce their names and associate those names with faces and places, with the labor and achievements of those who lead, this in itself will be an inspiration which will cause them to return to their work with greater enthusiasm and more wisely directed efforts.

Twenty-seven years have been woven into history since last this association met within the borders of our peninsular state, and I have been curious to know whether that earlier visit to us has borne visible fruit or not. A comparison of the program of that meeting with that of the present one demonstrates the wondrous growth in membership, and especially in the breadth and scope of its work, which this our National Educational Association has passed thru. From four working sections at that time it has expanded into eighteen, and from a membership of less than four hundred in 1874 it has grown to nearly or quite ten thousand. A moment's comparison will show the growth in our own state, and this will be a just and adequate measure of the increased interest which our people have taken and are taking in the cause of popular education.

The following table illustrates the growth in sentiment and interest in educational matters in Michigan, so far as mere figures may indicate growth, during the interval since the last Detroit meeting:

Children in school, census of 1874	-	-	-	-	436,694
Children in school, census of 1900	-	-	-	-	721,698
Teachers	-	-	-	-	12,276
Teachers	-	-	-	-	15,924
Total wages	-	-	-	-	\$1,917,011.10
Total wages	-	-	-	-	\$4,503,549.39
Number of volumes in libraries 1874	-	-	-	-	170,449
Number of volumes in libraries 1900	-	-	-	-	969,767
Number of schoolhouses	-	-	-	-	5,702
Number of schoolhouses	-	-	-	-	8,035
Value of schoolhouses	-	-	-	-	\$8,912,698.00
Value of schoolhouses	-	-	-	-	\$19,338,173.00

Time will not permit a comparison in other directions, but from a careful study of the questions considered at the 1874 meeting of this association it is safe to say that all lines of progress suggested at that

time have been enthusiastically entered upon, and several features have found permanent places in our educational system.

Sixteen thousand teachers, thirty thousand school officers, seven hundred and twenty thousand pupils, with 25 per cent. of our population in daily attendance in our schools, nearly five million dollars expended annually for teachers' wages, a million volumes in our township and district libraries, and nearly twenty millions invested in schoolhouses for our common schools—all these are eloquent facts attesting the large interest our people take in their public schools.

I may also be pardoned if I refer to the fact that in the organization of our schools the various grades are so closely linked to each other that it is practically possible—indeed, it finds an exemplification every year—for any boy or girl of our commonwealth to proceed steadily and without embarrassment from the lowest grade to and thru the undergraduate and postgraduate courses of our great state university. By proper energy any ambitious and high-spirited youth in Michigan, tho he may be the son of the humblest home, may mount to the topmost round of the educational ladder, aided and encouraged at every step by the large and generous provisions of the state.

This leads me to suggest to our visitors from the East, the South, and the West that you have now come within the boundaries of the great Northwest Territory, which by the terms of the ordinance of 1787 was thereafter to be sacredly devoted to the fulfillment of the principle that, "religion, morality, and knowledge being necessary to good government and the happiness of mankind, schools and the means of education shall forever be encouraged." It is not alone we who dwell in the immediate territory covered by this ordinance who have been the beneficiaries of the principles of that immortal instrument, but you especially who have come from the West are also in a very emphatic sense the inheritors of the idea of setting aside a certain fixed proportion of the public domain for the support of educational institutions. Thus are we grandly fulfilling the proposition laid down by Horace Mann fifty-four years ago—applied to Massachusetts, but equally true of Michigan—that "the property of this commonwealth is pledged for the education of all its youth up to such a point as will save them from poverty and vice and prepare them for the adequate performance of their social and civil duties."

It is more than a mere sentiment that would attach unusual importance to this first meeting of our National Educational Association in the twentieth century. We are on the eve of great and important changes in our educational methods, especially those which apply to the education of the pupils in our rural communities. The farmer's boy is awakening to the thought that, unless he takes advantage of at least a good high-school education, he will be sadly handicapped in the race of life.

As a worthy contribution to this idea the farmers of Michigan last year sent 17,772 of their sons and daughters as non-resident pupils to neighboring high schools. For the privilege of crossing the boundary line between their own district and that of the high school they paid in non-resident tuition fees \$87,849. Besides this amount they paid at least on an average of fifty dollars for each pupil to cover the cost of transportation, books, and extra clothing, thus making an extra expenditure aggregating nearly a million dollars, and this after these farmers had paid their regular and ordinary school taxes.

The character of our education must change with the oncoming of the years of this highly practical age. We have educated the mind to think and trained the vocal organs to express the thought, and we have forgotten or overlooked the fact that in about four times out of five the practical man expresses his thought by the hand rather than by mere words. It is a question worthy of most serious consideration as to which of two men exerts the more potent influence on our twentieth-century civilization—the one who invents and portrays his thought by the cartoon which adorns the front page of our modern daily newspaper, or the one who seeks to exert his influence by his written editorial; or, to use another illustration, the man who by the skill of his fingers expresses his thought in the form of a structure over which the true American can write that most blessed word, expressive of the one divinely established organization, the home; this in contrast with that other man who by his expressed thought seeks, it may be, to warp the judgment of twelve of his countrymen who constitute a jury. It is time that the calling and labor of the carpenter and the architect were raised to the dignity of that of the lawyer, and this our modern school must do. In other words, manual training must occupy a larger place in our search for better educational methods with which to meet the demands of this new age.

I have suggested only two of a large number of important questions which must find solution at the hands of the schoolmaster. But my words must be very brief. We feel ourselves highly honored by your presence here; we are glad to be a part of so great an army, not illustrative of the arts of war, but intent upon the high and sacred duty of training that most important factor of our modern civilization, the twentieth-century boy, into a forceful and influential citizen of the world.

Two years ago we as an association were welcomed to the "City of the Angels," on the borders of the western sea, by the state superintendent of public instruction of the commonwealth of California. In closing his eloquent address he used a word borrowed from our dusky brothers of the Hawaiian Islands, and by its threefold repetition sought to emphasize his welcome. The word was *aloha*, and he closed by saying "*Aloha, aloha, aloha*," accompanying the words with the suggestion that this was to be interpreted "Welcome, welcome, welcome." I have since learned that

this word admits of a warmer and more emphatic interpretation. Those are a simple folk, the Hawaiians, who live on the islands bathed by the waters of the great Pacific, but the language used by them in salutation is beautifully and forcefully expressive. "*Aloha*" may be interpreted as "I love you," and is the common salutation when friend meets friend or associate. If the meeting is between two persons from slightly varying conditions in life, the inferior greets the other "*Aloha nui*," which is, being interpreted, "I love you more." If again the greeting is to one much the superior, and it is desired to show great respect, the salutation is "*Aloha nui loa*," "I love you more and more." Therefore, because we regard you all as in every way our peers, we greet you with "*Aloha*," "We love you." Because very many of you have been longer on the way, because you are more experienced in the high and responsible calling of the teacher, we greet you "*Aloha nui*," "We love you more." Because here are assembled the truly great of our profession and of our nation, those respected and beloved here and abroad, our hearts go out in the cry, "We love you more and more," "*Aloha nui loa*."

PRESIDENT JAMES B. ANGELL, UNIVERSITY OF MICHIGAN

Members of the National Educational Association:

In behalf of the good state of Michigan, I join with my colleagues in bidding you welcome to our soil. We greet many of you as old personal friends, whom it is a great delight to meet again. We greet yet more in this vast assembly whose names and whose writings are familiar to us, but on whose faces we now for the first time have the pleasure to look. We greet with heartiest hospitality this whole company of men and women gathered from all parts of this broad land, co-workers with us in a common cause.

We welcome you to a city and a state which have long been deeply interested in education and always hospitable to new and broad ideas upon that subject. In 1804, when there was but a small frontier village here, Gabriel Richard, the Catholic apostolical vicar, established a school here, and in 1816 John Monteith, a Presbyterian minister, established another, and they worked together in Christian harmony. In 1817 Judge Woodward, who was virtually the lawmaker here, familiar with the ideals of the University of France, conceived of an organization which should provide a complete system of education from the primary school to a great university, and fixed a tax of 15 per cent. for its support. Richard and Monteith, the Catholic and the Presbyterian, were the first professors appointed, and wrought together in an unsectarian spirit, prophetic of the future catholicity of the administration of education in the state. A most romantic and pathetic fact is that the Indians in this vicinity made a large gift of lands to be divided between the Roman

Catholic church of St. Ann's in Detroit and the infant college, for which their names deserve to be classed with those of John Harvard and Elihu Yale.

The founders of this state had large and generous ideas on education. They embodied them in our first constitution, drafted in 1835. That instrument provided for the encouragement of all kinds of education, authorized the establishment of common schools and the appointment of a superintendent of public instruction, the first instance in American history, and, in effect, as the courts have decided, made the trustees of the state university a branch of the state government co-ordinate with the legislature and independent of legislative control in the use of their endowments.

As they in their prescient vision swept over the whole range of schools from the lowest to the highest, so fortunately the people of the state have long cherished all their schools as parts of one system. So, especially of late years, the university, the normal college, and the agricultural college have kept in so close and helpful relations to the common schools and to each other that the boy in the log schoolhouse in the northern woods can see his way clear, straight away before him, up thru the secondary schools, to the close of his career in college or university. Such is the Michigan idea of public education.

So you may well believe that a state which has reared two generations under such educational ideas and institutions is uttering no hollow or insincere words when it gives its most heartfelt welcome to an assembly like this. We come to thank you in advance for bringing to us your best thoughts and the rich fruit of your experience. We shall delight to sit at your feet and learn what you have to teach us. We trust you will carry with you none but pleasant memories of your visit to Detroit.

WALES C. MARTINDALE, SUPERINTENDENT OF CITY SCHOOLS, DETROIT

With the words of greeting already extended, my friends, you must feel that Michigan and Detroit, and the educational forces thereof, most heartily welcome you to our state, our city, and our homes. In behalf of parents, teachers, and children, your coming is welcomed as bringing force and inspiration to the Detroit schools.

You bring with you to this fortieth annual meeting of the National Educational Association the knowledge and wisdom of accumulating years, the sense of discrimination and ripe judgment so necessary to the future guidance of our schools. That we should look to your body for guidance is right and proper, as the people of the country look to its leaders in education for a progressive, tho conservative, policy in school administration.

A school hobby may have the jewel of life for its central thought,

but should be suppressed until a complete idea is brought forth to form with others the basis of our work. These ideas are at the same time the result and the cause of our civilization. In introducing new ideas into the schools we must discriminate between those things which are speculative and those for which the public should be taxed as necessities. The public school, while containing the latest and best thought of acknowledged leaders, should not become the prey to a supposed idea until test of fitness for survival has demonstrated its right to a permanent place.

The preamble of your constitution states that your organization is formed "to elevate the character and advance the interests of the profession of teaching, and to promote the cause of popular education in the United States." My friends, I welcome you here because your association stands for all that is best in education, for all that is helpful to those who attend your meetings. We hope your coming may give the words "culture" and "training," as commonly used, a more sterling significance.

The test of life in any calling is intelligence, efficiency, and moral stamina. These qualities should be the test of the school. Help us to courses of study which produce these attributes. Give us more true-hearted men and women, and less method. Let us continue to build character, the foundation of which is duty. Our schools should maintain and produce the rugged independence of thought and action of America's forefathers, and eliminate time-serving diplomacy which places individual security and prosperity before permanent liberty and personal independence. The solution of the problems of education both at home and in our new possessions depends largely upon the advice and counsel of your body. Your members have been called to places of trust and responsibility in the new dependencies of this country. The future of Porto Rico, Cuba, and the Philippines depends more upon their teachers than upon the sword. Much has already been done; the future problem is not to be solved by the army or the navy, or both forces combined. The teacher and the home will solve the future problem of government in this country and in any new lands coming under its flag. Former mistakes of reconstruction in our home country should bring forth methods of education in our new possessions which will make our wards self-supporting thru manual pursuits, and prepare them for their future places in social and political reconstruction. By a united effort, the force which is to assist in solving this and other problems of government should be organized as a separate department, with its separate head, subject to no political exigency.

Among those who have forever ceased to meet and act with you is one who for years was Michigan's most active representative in your counsels. I cannot close without alluding to the work of this illustrious

member of your association. Tho Burke A. Hinsdale has passed from us, his influence and work will forever survive.

Members of the National Educational Association, we rejoice that in following the star which has brought you to us you bring us, not worldly gifts, but gifts which will help us to assist others to live more profitable and godly lives.

RESPONSE

RICHARD G. BOONE, SUPERINTENDENT OF SCHOOLS, CINCINNATI, O.

I have listened with pleasure, and I think excusable pride, to the kind words of welcome just spoken by these representatives of the great state of Michigan, and of her metropolis, whose hospitality we are here to share. For myself it seems almost more fitting that I should join in welcoming these hosts to Michigan than that I, from among the incoming thousands, should share your hospitality, and be, in any small part even, the object of your thoughtfulness.

Six years' residence in Michigan, in the suburbs of this city, sufficed to discover a wholesome activity in matters of personal and public improvement, many noble men and women, and scores of friends whose interests are ours. I take it the spirit of welcome is mutual; and the impulse to respond is mutual. We are here, because here center our professional and personal concerns. A year ago you gave us a cordial invitation, and now you extend a no less warm, tho comfortable, reception. This should be a glad week for many thousands of teachers and their friends. We appreciate the painstaking forethought for our comfort, for our amusement, and for our instruction. Speaking not for myself alone, but for all of this concourse whom I have the honor to represent, I am quite assured that you gentlemen and friends will be able to make good all your generous offers in these various respects. We shall enjoy your river, your parks, and your homes. I bespeak for these thousands before you, and other thousands to come, that they may come to know you as I know you, and appreciate your great work and the good things for which you and your state stand.

As representing many millions of people, and the interests of other millions of children, these gentlemen and ladies bring you, we are assured, a rich feast of good things for the mind, clean and genial companionships, and hearts to enjoy, equal, if possible, to your care for our comfort. And as I stand here before you all, seeing among you hundreds of familiar faces, I am reminded that the real good of a series of meetings such as these lies not in the papers read and the formal discussions and the parliamentary procedure and the fine organization, important as

these are. A richer harvest may come to you from a personal touch with the friend or stranger at your side, a quiet conference with a fellow-worker, the give-and-take of social companionship, and the uplift that always comes from acquaintanceship with the people of your profession whom you have not before known.

Let it be a part of your business this summer, and every summer, and always as opportunity offers, to make yourself familiar with the best that is being thought and said and done in other places, not in our own land alone, by members of your profession. Waste no time in useless experiment. Use the results of others' experience. That is what you are here for. Identify yourself with whatever educational movements exist for the improvement of the schools. Become possessed with the spirit of the times and of our country. Here you will find a fair representation from most of the states, and from our English sister, Canada. It is a great and rare opportunity for a live teacher to make much of a short week. We have been assured that whatever is here is for our delectation and enjoyment—make the most of it.

In conclusion, gentlemen, we thank you for your words of confidence and hospitality, for your comfortable accommodations and fair weather; and we trust that our behavior and appreciation may be such as to justify all this care in our behalf. Permit me to assure you of our joy at being in Detroit, among friends, our confidence in the wisdom of the Executive Committee in selecting this place for the meeting of 1901, and our determination to take counsel of your zeal, and bear our share in the efforts to make this the greatest meeting in the history of the great National Educational Association.

ADDRESSES

PRESIDENT'S ADDRESS

THE DUTY OF THE NATIONAL EDUCATIONAL ASSOCIATION IN SHAPING PUBLIC EDUCATIONAL OPINION

JAMES M. GREEN, TRENTON, N. J.

Mr. Chairman, Members of the National Educational Association, Ladies and Gentlemen:

We are assembled in our first meeting of the twentieth century. As we cross this boundary line between two cycles, the one characterized by the greatest accomplishments of the world's history, the other by the expectation of things greater than have yet been achieved, it is quite natural that we should give attention for a moment to the particular part in the activities of men that seems to be ours.

Our association was formed in 1857. It sprang, Minerva-like, from the head of education. Its childhood may be said to have lasted till 1884; its youth, from that time to the present, when it may be said to be entering into the full strength of manhood.

As men destined to great usefulness often manifest superiority early in life, so the National Educational Association early began to make its influence felt. While in the beginning of its history its numbers were small, they were composed of vigorous, earnest, thoughtful persons—persons who gave their attention, not only to the most fundamental propositions of local and state education, but also to matters of national concern.

A glance at the programs of the different meetings will show that there is scarcely a question of school organization and government, or of selection of subject-matter, or of method in treatment, from the kindergarten to the university, or from the independent rural district to the nation as a whole, including its dependencies, that has escaped consideration either in some one of the departments or on the general program. Rural schools, graded schools, elementary, secondary, and higher education, the kindergarten, manual training, art, music, the metric system, Herbartianism, morals, school architecture, the relation of superintendent to teacher, to school board, systems of raising money, of selecting school officers, permanency of appointment, training and certificating teachers, interstate comity, etc., are types of the many questions that have been considered frequently and carefully.

The work of the association has resulted in some definite institutions, such as the National Bureau of Education, but by far the greatest good has been thru the modified and enlightened opinions its members have carried from the annual conventions to their local fields of labor. It is safe to say that to this influence is due the fact that, while we have no strictly national educational system, the education of our nation is more nearly uniform and has produced more uniformly good schools than that of any other country in the world.

While this association has been a brain center for countless thought-tracks, a storage battery thru which have passed many lines of intelligence, yet its growth has had the characteristics usual to an institution in a new country. It has had many crudities. If we are to form our opinion from the statements of the older members, there have been times when it has been ambitious in personal diplomacy, and indeed times when even a more germinal state of politics has prevailed.

But our association has now reached a stage of responsibility such that, if we are still to lay claim to the adjective "national," we must put aside our crudities, take our place in line with the conventions of other great nations, and assume a general rôle of seriousness in the problems we undertake. It is proper that we should try ourselves and find wherein we are wanting. We are indebted to one of our journals of education for a symposium of criticisms, favorable and unfavorable, concerning ourselves. One who read these criticisms carefully must have reached the conclusion that in the main they were favorable to our organization. There were, however, two or three that may receive attention here:

First, concerning the size of our annual volume. There are those who think the volume too bulky; there are those who think it too small. In all candor, this does not appear to be a very serious question. It would seem that much more depends upon the quality of matter in the volume than upon the number of pages it contains. If the Executive Committee and the heads of departments continue to exercise the care they have hitherto taken in the selection of persons to appear before the meetings, they will find it very embarrassing to say to such persons as they invite to prepare papers for the conventions that they will presume to pass upon their manuscript and edit it with a view to publication. No one should be invited to appear before the National Educational Association whose views are not sufficiently authoritative to be worthy of publication, so long as he keeps within time limits. Certainly, worthy men who give us their time and thought are entitled to this consideration.

Second, concerning the manner of choosing the Executive Committee. The author of this paper is not today as much concerned in the manner of choosing a president as he might have been had he been a candidate one year ago; hence he may be credited with speaking without personal motives.

For one, I have never been able to appreciate the objections urged to having a nominating committee appointed by the President. There may be criticisms on the appointments to this committee by some particular president, but the plan itself was in keeping with the general tendency of our country to fix responsibility by intrusting the powers of the many to the hands of the few, always with the reserve right to withdraw this trust. Note the appointive power of the president of the United States, of the governors of the different states, of the mayors of the different cities, extending to boards of education, of the trustees of the different institutions of learning, of the presiding officers of the different institutions, etc.

Education, if it is genuine, is always in advance of the masses; hence the growing tendency of our people to fix responsibility in men whom they can trust and in whom they believe. But our association has chosen to change this system, and with the change there is no conflict. Each state may now name its representative on the nominating board; hence each state has a voice. I do not see how anything more democratic could be asked. Whatever may now be the wisdom of the acts of the nominating committee, each state must fully share the responsibility for these acts. No representatives of a state can now charge the responsibility of action to the representatives of another state without acknowledging, tacitly at least, their own incompetency to take their part in dealing with their fellow-men.

The plans proposed, viz., to put men in nomination for the Executive Committee a year in advance of election, and then conduct a campaign, would certainly prove exceedingly distasteful to the men the country would like to see in these offices. It would be a fatal mistake for the National Educational Association ever to resolve itself into an election organization. No one who presumed to be a candidate has ever yet been elected to its highest office, and no such one ever should be. A deliberative body of the character of this association is much more capable of selecting its Executive Committee than would be the individuals who would constitute that committee. I can think of some men who, it seems to me, would greatly honor the presidential chair. I cannot imagine them in the rôle of seekers for that office. If our association is to be truly dignified, it must rise above even the appearance of gratifying personal ambitions. Whatever may be the records of the executive committees of the past—and they need no eulogist—we must have men in the future who know the educational problems of the country and the persons who are capable of throwing light on those problems, rather than men skilled in the art of vote-getting.

The organization of our association needs reviewing, and certainly some revision. The general program should always be an important and popular part of our meetings, but it is to the departments that we must

look for the conservation of that class of thought most applicable to our schoolroom work. It is the relation of the general program to the departments, and of the departments to each other, that most needs revision.

Under our present rules it is quite possible for all of the departments to be working on the same subject and seeking the same men. Each department is practically independent of every other, and independent as well of the general program.

We have the Departments, for instance, of Kindergarten Education and Child Study; the Department of Elementary Education, the Department of Secondary Education, the Department of Higher Education; then the special Departments of Manual Training, Music, Business, Physical Education, Science, etc. Will anyone try to imagine elementary, secondary, and higher education with these special departments left out of consideration? Such an arrangement, if not the play of *Hamlet* with Hamlet left out, would certainly be the play of *Hamlet* with that distinguished character badly "drawn and quartered." Our departments remind us of lean-to's built to a house simply to get more room, and without regard to symmetry or convenience. We are in the position of trying to suit our subjects to our names, instead of our names to our subjects.

What does kindergarten mean other than simply the way we begin our schoolroom instruction? What does elementary education mean other than how much instruction in each of the branches should be given a child? What does secondary education mean other than how much instruction in manual training, physical training, art, music, etc., we should give in the high school? Perhaps elementary education is sufficiently unclassified as to subjects to constitute a department, but beyond elementary education it would seem far wiser to name the departments after the subject than after the grade of school. For instance, the Departments of Natural Sciences, Classics, Modern Languages, Art, Music, Physical Training, Manual Training, etc., would be much better guides to the line of work that might be expected in these different departments than some of the present titles.

The present Executive Committee has enjoyed the most cordial relations with the heads of departments, and believes that an examination of the program for this meeting will show that the different sections of the country, as well as the different topics of interest, are as fully represented as at any previous meeting. Hence I cannot be considered personal when I say that the program of every department should be submitted to the general Executive Committee before final adoption, and that in reviewing said programs and plans of meeting the general committee should be governed by fuller by-laws than are at present in existence.

It is now quite possible for a department to violate the general sentiment and policy of the association, even to the extent of holding a series of meetings when the meetings of the general association are in session. It is quite possible for a department to make of itself an advertising medium for the sale of books, shoes, patent medicine, Pears' soap, etc. This may be a worthy enterprise, but if we enter upon it, the association as a whole should share in the profits. The Executive Committee in reviewing department programs should have no desire to go farther than to prevent crossing subjects and trespassing upon the general rules.

Were the departments named after their specialties, it would be much easier to secure able specialists for the programs. It would seem that this is one of the points to which we must look for our greatest usefulness in the future. What of chemistry should I teach to my class, and how should I most effectively teach it? are two questions the correct answers to which would save the country untold sums of money and years of time. Answer the same two questions for each of the subjects of the curriculum, and the schoolmaster will be the greatest benefactor of all ages. It is safe to say that at least one-half of all the time spent in the schools is wasted by reason of its being spent on unprofitable subjects.

To the answering of these two questions our association should apply itself. Already we have made a beginning. The report of the Committee of Ten was, in the judgment of all, one of the greatest contributions of learning that have ever been made, and this report, so far as it went, was in this line. Everywhere in our land this report was read, and the school curriculum modified accordingly.

We are frequently asked to make appropriations for reports—sometimes for reports on subjects that possibly might wait; but reports and publications such as that of the Committee of Ten cannot be too frequent, provided they cover new ground and show definite progress.

Let me emphasize: If the National Educational Association is to shape wisely public educational opinion, it can do so only by establishing the most important and best-adapted subject-matter for schoolroom work, and this can be done only by securing the very ablest talent in the land thru the departments.

Finally, we need to spread abroad a stronger feeling of obligation to our association. We are fortunate in being able to secure some of the very ablest scholars and thinkers of our country for our programs, but there are yet many from whom the country is anxious to hear, persons who have been placed in responsible positions, and who owe it to the country to make their views known, who may not suffer interruption of a vacation to serve us. We should in some way inaugurate a systematic campaign to impress upon our great institutions of learning, and upon our men of

great accomplishments, the patriotic debt they owe to the education of their time.

The work of our association in administrative lines cannot be too highly commended. The efforts to establish a national university, to relate the collections in the Smithsonian to the different educational institutions of the land, to strengthen and develop the Bureau of Education, to establish and maintain proper ideals for education in our dependencies—in the islands and Alaska, as well as among the feebler races within our states—cannot be too highly commended or too strongly encouraged.

Our legislative bodies, whether national or state, are naturally concerned with many interests, and as naturally should welcome the results of the deliberations of a body single in purpose. If we are ambitious that our work should be only the best, we may be equally ambitious that it shall appeal with executive force to the minds of the lawmakers.

We enter upon the new century under the most favorable auspices. Our treasury is now in a condition practically to warrant the expenditure of the income of each year in promoting in the most efficient manner the causes that concern us. We have reached a position that commands the respect, not only of our nation, but of other nations. We may with courage undertake the most serious educational problems that present themselves to the minds of men. May our successes of the past be but feeble prophecies of the successes that await us!

PROGRESS IN EDUCATION

RT. REV. J. LANCASTER SPALDING, D.D., PEORIA, ILL.

Our belief is that the Word shall prevail over the entire rational creation, and change every soul into His own perfection; in which state everyone, by the mere exercise of his own power, will choose what he desires and obtain what he chooses. For although in the diseases and wounds of the body there are some which no medical skill can cure, yet we hold that in the mind there is no evil so strong that it may not be overcome by the Supreme Word and God.—ORIGEN.

Progress is increase of power and quality of life. It is this even when it seems to be but greater control of the forces of nature; for they are thus made serviceable to life. Education is the unfolding and upbuilding of life, and it is therefore essentially progress. All progress is educational, and all right education is progress.

The nineteenth century will be known as the century of progress—the century in which mankind grew in knowledge and freedom more than in all preceding ages; in which the energies, not of a few only, but of whole peoples, were aroused as never before. We have been brought into conscious contact with new worlds, infinitely great and infinitesimally small; we have formed hypotheses which explain the development of suns and planets; we have traced the course of life from the protoplasmic cell

thru all its endless varieties ; we have followed the transformations of the earth, from its appearance as a crust on which nothing could live, thru incalculable lapses of time, down to the birth of man and the dawn of history ; we have resolved all composite substances into their primal elements, and made new and useful combinations ; we have discovered the causes of nearly all the worst diseases, and the means whereby they may be cured or prevented ; we have learned how the many languages and dialects, with their wealth of vocabulary, have been evolved from a few families and a few thousand roots ; we have traced the growth of customs, laws, and institutions, from their most simple to their most complex forms. What control of natural forces have we not gained ! We have invented a thousand cunning machines, with which we compel steam and electricity to warm and light our cities, to carry us with great speed over earth and sea, to write or repeat our words from continent to continent, to spin and weave and forge for us. The face of the earth has been renewed, and we live in worlds of which our fathers did not dream. Filled with confidence and enthusiasm by this wonderful success, we hurry on to new conquests ; and as the struggle becomes more intense, still greater demands are made upon us to put forth all our strength. Our fathers believed that matter was inert ; but we know that all things are in motion, in process of transformation. The earth is whirling with incredible speed both on its own axis and around the sun. A drop of water that lies quietly in the palm, if it could be sufficiently magnified, would present a scene of amazing activity. We should see that it consists of millions of molecules, darting hither and thither, colliding and rebounding millions of times in a second. The universe is athrill with energy. There is everywhere attraction and repulsion, an endless coming and going, combining and dissolving, in the midst of which all things are changing, even those which appear to be immutable. The sun is losing its light, the mountains are wearing away. The consciousness to which we have attained that the universe is alive with energy has awakened in the modern man a feverish desire to exert himself, to be active in a world in which nothing can remain passive and survive ; and as greater and greater numbers are mobilized and set thinking, it becomes more and more difficult for the individual to stand upright and make his way, unless he be awakened and invigorated in mind and body. The ideal, doubtless, is the co-operation of all for the good of each ; but the fact is the effort of each to assert himself in the face of all, and, if needs be, at their cost. Nations, like individuals, are drawn into the world-wide conflict. The old cry of *vae victis* still applies, under conditions indeed seemingly less brutal, but more inexorably fixed.

In such a state of things whoever is not alert, intelligent, brave, and vigorous falls, as the ancient civilizations fell, before advancing armies filled with courage and the confidence of irresistible might. Hence, not

individuals alone, but nations, are driven to educate themselves, that they may be prepared for the competitive struggle which is found everywhere as never before in the history of mankind. Hence, too, in such a society there is necessarily progress in education; for education is vastly more than the knowledge and discipline acquired in schools.

The institutions into which men are gathered by common needs and sympathies, and by which they are lifted out of savagery and barbarism into intelligence and freedom, are the family, the state, civil society, and the church. By them the life of individuals and of peoples is evolved and molded more fundamentally and thoroly than it can be by any possible scholastic training and teaching. They not only provide and defend the things that are necessary to man's physical well-being, but they make possible the cultivation of his intellectual faculties. Schools are fatally impeded in their work when they receive their pupils from vulgar or impure homes, or when they are born in a tyrannical or lawless state, or in a corrupt civil society, or belong to a church which lacks faith and authority; and much of the adverse criticism of schools is due to misconceptions which lead to the demand that they shall do what it is not in their province or their power to do. Indeed, where the cardinal institutions are at fault, what is needed is not so much schools as reform schools; and a reform school cannot possibly be a normal home of education. The rationalistic philosophy of the eighteenth century had as one of its results an exaggerated belief in what schools can accomplish. Kant, who in his views on this subject is chiefly influenced by Rousseau, holds that man is merely what education makes him; and for him to educate means little more than to enlighten the mind concerning the right use of human endowments. In his opinion, if all are made sufficiently intelligent, all will be just, helpful, and good. It is the idea of Socrates that wrong-doing is only the result of ignorance. Tho we have largely outgrown this optimistic faith, it gave a mighty impulse to individual and national efforts to establish schools for the whole people, of which the national systems of the present day are, in great part, the outcome. The world-view, however, which has resulted from science and scientific theories of the universe has led numbers of thinkers to attach comparatively little importance to enlightenment or mental culture, and to lay stress chiefly on heredity and environment. The opinion tends to prevail that the mind and character of man, like his body, like the whole organic world, are the product of evolution, working thru fatal laws, where-with human purpose and free will, the possibility of which is denied, cannot interfere in any real way.

No one who is occupied with education can accept this theory without losing faith in the efficacy of his efforts and enthusiasm for his work. Fortunately, one may admit the general prevalence of the law of evolution without ceasing to believe in God, in the soul, and in freedom.

This is the position of Kant, and it is that which nearly all of us take. Without a thought of denying the power of heredity and environment in shaping man's life, we are certain that his free and purposive action is able to modify and, to a large extent, control their influence. It is, indeed, the tendency of right education to enable man to create his world, to teach him to live, not merely in his material surroundings, but in the spiritual realms of thought and love, of hope and aspiration, of beauty and goodness, until these become his proper and abiding home, for which climate and soil furnish merely the settings and foundations. And when we speak of progress in education, we think primarily, not of a fatal evolution, but of the forces and institutions which the human spirit with free self-determination and deliberate aim makes use of for the uplifting of the race. Here too, of course, we have growth rather than creation — growth of which certain races and peoples, especially favored by environment and heredity, we may suppose, have shown themselves more capable than others; and with our present knowledge of history we are able to assign, with some degree of accuracy, to each the part it has played in the education of mankind. The contributions of Israel, of Greece, and of Rome are known to all. We are less familiar with what geology and archæology have done to throw light, not merely on the structure and development of the globe, but on the course of human life in epochs of which we possess no written account. Wherever man has lived he has left traces of himself, which tell his story to the trained eye of the scientific student; and we are consequently able to investigate the earliest efforts of savages, in some remote stone age, to bend their rude minds to the conquest of nature. The darkness which overshadowed Egypt has been dispelled, and the rise and decay of the arts of civilization in the valley of the Nile are no longer a mystery. Archæological research has done less for the valley of the Euphrates; but much, nevertheless, has been accomplished there also. We have learned to read the cuneiform characters, which for thousands of years were the only literary script of the world. Babylon, we have reason to believe, was the source of the civilization of China, the oldest now existing.

"Egypt and Babylon," says Rawlinson, "led the way and acted as the pioneers of mankind in the various untrodden fields of art, literature, and science. Alphabetic writing, astronomy, history, chronology, architecture, plastic art, sculpture, navigation, agriculture, textile industry, seem all to have had their origin in one or other of these two countries." The Turanian or Mongol tribes of the valley of the Euphrates were probably the first to invent written signs and to establish schools. Tho we owe them the original impulses which have led to civilization, they themselves never rose above the stage of barbarian culture, an ascent which only the Semitic and Aryan races have been able to make; and among them, in the pre-Christian ages, the Jews, who are Semites, and the Greeks and the

Romans, who are Aryans, have been the chief creators and bearers of the spiritual treasures which constitute the essential wealth of humanity. To the first we owe the mighty educational force which lies in a living faith in one supreme God, creator of all things, who demands of men that they love and serve him with righteous hearts. In their schools they emphasized the necessity of religion and morality, which are indeed the permanent foundations whereon all genuine human culture must forever rest. From the Greeks we derive the vital elements of our intellectual life, our philosophy and science, our literature and art; and their educational ideals are the most potent mental stimulus in the modern world. The school, we may say, is not only a Greek word, but a Greek institution.

The Romans excelled all other peoples in genius for law and the science and art of government; and hence they believed in discipline rather than in culture; and in their schools, until they were brought under the influence of Greek philosophy and literature, their chief concern was to make men courageous, dignified, obedient, enduring, and reverent.

When the civilizations of the Jew, the Greek, and the Roman declined and fell to ruin, when the empire was broken to fragments by the barbarous hordes that century after century laid waste its fairest provinces, the world seemed destined to sink into the darkness and confusion out of which it had been struggling with infinite pains for thousands of years; and if a wider, juster, and more enduring social state has been built on the ruins of pagan culture and religion, this has been accomplished chiefly with the aid of the principles and ideals of Christianity. We possess a faith and insight, a depth and breadth of intellectual view, a grasp of the elements of human character, a largeness of sympathy and appreciativeness, to which no pre-Christian people or age ever attained; and after the most patient and conscientious investigation into the causes which have made the modern world what it is, the impartial and enlightened mind is driven to confess that, as the civilized nations date their history from the birth of Christ, so he is the primary and vital impulse in all the most excellent things they have achieved. We are, beyond doubt, the heirs of all the past, and have become conscious of the debt we owe to Jew and gentile, to barbarian and Greek; but the ideals which determine our views of God, of man, of the family, of the state, of the aim and end of all progress, are Christian ideals; and if this light should go out in darkness, it is not conceivable that our civilization should survive. The genius of Hellas, as it is manifested in her greatest philosophers, poets, artists, orators, and statesmen, we have not surpassed; in our own day some of the noblest minds are not consciously Christian. In the long conflicts with the barbarism which overwhelmed the Roman empire, individuals and peoples who had been baptized into faith in Christ have not always, in the midst of the confusion and ignorance, of

the lawlessness and violence, had a clear view of the divine truth, goodness, tolerance, and love which are revealed in Him; have even at times been the foes of the godward march of humanity. Yet, when all is said, the supreme fact remains that with Him the new life of the race begins; that in Him its divinest hopes and aspirations are enrooted; and thru Him its highest and most beneficent conquests have been made. It is to Christianity, not to science, that we are indebted for our faith in the fatherhood of God and the brotherhood of mankind; in the immortal and godlike nature of the soul; in the freedom of the will; in the paramount worth of character; in the duty of universal benevolence, having as its implication equality of laws and opportunities for all; in the progress which is marked by an ever-increasing domination of the spirit over matter and the gradual spreading of the kingdom of heaven over earth.

With Christ a new and immense hope was born in the heart of man—a hope of everlasting life and endless progress; a conception of a gradually developing divine purpose in history; of a return thru labyrinthine and devious ways of the whole creation to God, from whom it springs. This hope and this conception are not found in the religions of paganism, nor can science inspire or justify them. In the individual and in the race, as in nature, growth and decay are simultaneous. When the one predominates there is progress; when the other, regress and final extinction. And as it would be absurd to imagine that a human being, in this present existence at least, might continue to grow forever, it would not be less extravagant to believe that a people or the race itself might continue indefinitely to make progress. Nations, like individuals, are born, grow, and perish; and mankind, to whatever heights it may rise, must rise but to fall. The monuments of the most glorious achievements are destined to become fragments of a globe on which no living thing can longer be found. As endless time preceded the appearance of man on earth, so endless time shall follow his disappearance from the visible universe. All that is possessed must be lost, since possession is a thing of time, and what time gives it takes again.

If it were possible to embrace in one view the entire history of our little planet, we should neither be disturbed by the failures nor made greatly glad by the successes of men, so inevitable and transitory it would all appear to be. This is the standpoint, this the conclusion, of science, when it is accepted as the sole and sufficient test of reality. But we cannot take delight or find repose in such wisdom. Our thoughts wander thru eternity; our hopes reach forth to infinity; we are akin to atoms and stars, to the worm and to the Eternal Spirit. The whole past has helped to make us what we are, and we in turn shall help to make the whole future. In the midst of a perishable universe, the soul dwells with the indestructible; in the midst of a world of shadows, it seeks repose with the all-real and abiding One. In all faith in progress, in all efforts

to advance, we follow the light of an ideal, which, if we look closely, is found to be that of perfect truth, beauty, and goodness, wedded to absolute power. Whatever the means taken to approach it, this is the end which noble minds forever hold in view — the ultimate goal of all our yearning and striving, which the laws of reason and the necessities of thought compel us to identify with the Supreme Being from whom and to whom all things move. Our way leads, not from nothingness to nothingness, from death to death, but from life to more and higher life; from spirit to the Infinite Spirit, who is perfect truth, beauty, and love, wedded to absolute power. It is possible, even when there is question of things the most vital and indispensable to human welfare, to take opposite views and to defend with plausible arguments whatever opinion. One may or may not set store by money or pleasure or position or friendship or culture. He may hold that civilization awakens more wants than it can satisfy, creates more ills than it can cure; that art, like the tint and perfume of the flower, is but a symptom of decay; that all monuments are funeral monuments. One may deny free will; or, accepting it, may think that license is the inevitable result of liberty, and that the best fortune for individuals and societies is to be governed by able tyrants. Our estimates depend so largely on what we ourselves are that agreement is hardly to be looked for. The light which visits young eyes is not that which falls on those who have been sobered by the contemplation of man's mortality. Serious minds have maintained that life, together with the means whereby it is propagated, preserved, and increased, is the sum of all evil; that the love of life is the supreme delusion in a universe where whoever feels and thinks necessarily suffers irremediable pain. Hence they believe, not in progress, but in regress; holding that, as all life has sprung from the unconscious, the sooner it sinks back into it, the more speedily shall all things be reduced into eternal order.

This is not merely a speculative view of a few exceptional individuals: it has been and still is the religion of millions in eastern Asia, whose dream is everlasting repose in nothingness; who neither desire nor make progress. The ultimate standard of value is helpfulness to life; for except for the living nothing can have nor be known to have worth. But our belief in the goodness of life is the result of a primal feeling, not of philosophic or scientific demonstration. It is essentially a faith which arguments can neither create nor destroy — a faith which draws its nourishment from the conviction that life is the first cause and last end of all that exists, the most real of things and therefore the most excellent; and this conviction has been begotten in the mind and heart of man by the Christian religion with a power which has created a new world, and given to civilization an enduring vitality and an all-embracing scope of which the most divinely inspired minds of antiquity could have but visionary conceptions.

Our Christian faith in God means belief in increase of life, in progress, which is his appeal and insistence bidding us win his kingdom and himself. It is the ever-widening and deepening prevalence of his will, which is good-will to men; that they may grow in power of mind, heart, and conscience; that they may be made stronger and purer and more healthful in body and in soul. Thus progress, whether it be considered as inner development and purification or as enlarging mastery over the external world, becomes the most legitimate, the most fruitful, the most invigorating aspiration of our nature; becomes part of all our hoping, thinking, and striving. It lies at the heart of the divine discontent which makes it impossible for us to rest self-satisfied in any achievement; which turns us from whatever is won or accomplished to the better things and nobler men that are yet to be. It is a restless urgency to growth springing from an innermost need of freedom and light. It dispels ignorance, abolishes abuses, overthrows tyrannies, and bears us upward and onward along widening ways. It sweetens toil and gives the courage to bear bravely the worst that may befall.

Faith in the goodness of life, issuing in ceaseless efforts to develop it to higher and higher potencies, has determined our world-view and brought us to understand that the universe is a system of forces whose end is the education of souls; that the drama enacted thruout the whole earth and all the ages has for its central idea and guiding motive the progressive spiritual culture of mankind, which is the will of God as revealed in the conduct and teaching of Christ.

To sketch the history of the progress of education from the fall of the Roman empire and the decay of pagan learning down to the present time would require a much larger canvas than is offered to one who makes an address. As a result of the ruin wrought by the barbarians, whose inroads and depredations continued thru centuries, what had been the civilized world sank into deep ignorance and confusion. For a long period learning, banished from the continent of Europe, found an asylum chiefly in Ireland, in the schools of the monks, whence it slowly spread to Scotland and northern England. When on the continent of Europe, at the end of the eighth century, Charles the Great began to foster education, he was forced to appeal for assistance to the religious teachers of the British isles. In fact, the first revival of learning in mediæval Europe may be said to have been due to the influence of Irish monks. They carried their knowledge and discipline even to Iceland. Later on they were followed by their Anglo-Saxon brethren, under the lead of men like Egbert, Wilfrid, Willibrod, and Boniface. In 782 Alcuin, an Anglo-Saxon, who finally became bishop of Tours, was placed by Charles at the head of the "Palace School" at Aix-la-Chapelle, the principal residence of the emperor; and he and his pupils became the first teachers of Germany. It was a true revival of education; tho, on

account of the difficulties of the times and the lack of books, little progress was made. The impulse thus given continued to be felt all thru the disorders which followed the dismemberment of the empire of Charles and the fierce conflicts with the invading Norsemen and the fanatical Mahometans. In the eleventh and twelfth centuries St. Anselm and St. Bernard, Roscellin and Abelard, Peter the Lombard, Arnold of Brescia, and John of Salisbury rendered important service to the cause of enlightenment. The Muslims founded universities at Cordova, Toledo, and Seville about the beginning of the twelfth century, but they did not flourish more than a hundred years; while the Christian schools which had grown up around the cathedrals and monasteries in various parts of Europe began to develop new life and to enlarge the scope of their teaching, so as to embrace theology, law, arts, and medicine. They also admitted to their classes and lecture halls students from every part of the world.

From 1200 to 1400 the number of these universities increased to about forty, and their students were counted by the thousand. "Thus," says Davidson, "in the thirteenth and fourteenth centuries education rose in many European states to a height which it had not attained since the days of Seneca and Quintilian. This showed itself in many ways, but above all in a sudden outburst of philosophy, art, and literature. To these centuries belong Albertus Magnus and Roger Bacon, Thomas Aquinas and Bonaventura, Cimabue, Giotto, and the cathedral builders, Dante and Petrarch, Chaucer and Gower, the minnesänger of Germany, and the *trouvères* and *troubadours* of France." Scholasticism, he continues, saved Europe from moral suicide, ignorance, and fleshliness.

"In modern Europe," says Emerson, "the Middle Ages were called the Dark Ages. Who dares to call them so now? They are seen to be the feet on which we walk, the eyes with which we see. It is one of our triumphs to have reinstated them. Their Dante and Alfred and Wicliffe and Abelard and Bacon; their Magna Charta, decimal numbers, mariner's compass, gunpowder, glass, paper, and clocks; chemistry, algebra, astronomy; their Gothic architecture, their painting—are the delight and tuition of ours."

The Renaissance of the fourteenth and fifteenth centuries marks a new advance in the educational history of mankind. The treasures of the classical literatures were revealed, America was discovered, the Copernican astronomy was divined, the printing press was invented, gunpowder and the compass were applied to the arts of warfare and navigation, and voyages and enterprises of many kinds were undertaken.

"All the light which we enjoy," says von Müller, "and which the active and eager genius of the European shall cause every part of the world to enjoy, is due to the fact that at the fall of the empire of the Cæsars there was a hierarchy which stood firm, and, with the help of the

Christian religion, communicated to the mind of Europe, that hitherto had moved within a narrow circle, an electric thrill which has endowed it with an energy and power of expansion whose results are the triumphs of which we are the spectators and beneficiaries."

In the sixteenth century Rabelais, Erasmus, and Montaigne take special interest in questions of education and propose important improvements in method and matter. Luther and Knox labored strenuously to found popular schools in Germany and in Scotland.

The Jesuits devoted themselves with much success to education, establishing in various parts of the world grammar schools, colleges, and universities, in which they taught the classical learning and trained many of the greatest minds of the seventeenth century; among others Descartes, who is the true father of modern philosophy and science.

In the seventeenth century, also, Comenius, the Moravian bishop, propounded and arranged a course of instruction, extending from infancy to manhood—from the home school to the university; and his views have exercised a lasting influence on the development of educational theory and practice.

In the eighteenth century Rousseau awakened a widespread interest in questions of education, tho his own views on the subject are generally false. He stimulated Kant and Goethe, Basedow and Pestalozzi, to occupy themselves with pedagogical problems; and they in turn compelled the attention of many others. Thus at the opening of the nineteenth century an enthusiasm for education such as had never before existed had been aroused. Hitherto the purpose of the school had been to teach the privileged classes and to prepare for the learned professions: henceforth the whole people are to receive instruction; for as the ideals of democracy impress themselves more distinctly on the general mind, it becomes more and more obvious that, as all have the same rights, all should have the same opportunities, the chief and most important of which is that of education. The state in consequence is led to establish free schools wherein all may be taught. Where there is a general political liberty, there must be a general enlightenment. To do this work an army of teachers is required; and as the principles on which all theories and methods of education rest are brought more fully into consciousness, greater and greater demands are made upon those to whom the office of teaching is intrusted. Education being a process of conscious evolution, they who assist and guide it must themselves continue to grow. The teacher's culture must broaden and deepen as knowledge increases. The more progress is made, the more difficult his task becomes. It is easier to train to obedience than to educate for freedom. This, however, is the only true education; for authority rests on liberty, and its chief end is to secure and enlarge the rights and opportunities which none but beings endowed with freedom can possess. To educate to the freedom which is

truth, it is not enough to strengthen and fill the memory, to discipline the practical understanding, or to accustom to observances : one must quicken the whole man, must raise and purify the imagination, the heart, and the conscience. When the purpose is to inspire piety, reverence, admiration, awe, enthusiasm, love, and devotion, it can be accomplished by those alone in whom these high and holy sentiments are a living power, whose thought and conduct create an atmosphere in which the soul breathes a celestial air and is made aware of God's presence. They who have no religious faith or feeling can no more teach religion than one who has no literary taste or knowledge can teach literature, than one who has no musical ear can teach music.

If in considering educational progress we limit our view to our own country, we cannot but recognize the advances which we have made. From the planting of the colonies, indeed, down to the war of independence there was a gradual decline of popular interest in schools ; and during the revolutionary period there was so much else to occupy public attention that little was done to promote education. But in the early part of the nineteenth century there was a general revival of intellectual activity, and a new enthusiasm for whatever might diffuse enlightenment ; and it has come to pass that now there is an almost universal belief among us that the greater the intelligence and virtue of the people, the safer will be our political and civil institutions, which we hold to be founded on permanent principles of reason and justice.

The work which has been accomplished in the last fifty years in organizing a great system of schools in which free elementary instruction is offered to all ; in establishing in cities and towns free high schools in which secondary education is given to those who desire it ; in creating for men and women universities, which are rapidly widening their scope and increasing their effectiveness, has never been equaled in the history of any other people. We have founded also free training schools for teachers all over the union ; and in nearly all the states there are schools for defectives and delinquents. In our white native population illiteracy has almost ceased to exist. All are readers of the newspapers at the least, and are thus impelled to some kind of mental self-activity concerning questions which are of interest to the whole world as well as to Americans. In this way the people of the different parts of the country are brought into intelligent communion ; and in learning to understand one another they find that it is possible to adjust conflicts, whether of interest or opinion, by rational methods, without violence or bloodshed. Nowhere else is there such popular faith in education, such willingness to be taxed for the building and maintenance of schools. While the state provides elementary instruction for all, it has no thought of claiming an exclusive right to teach. The liberty of teaching is, in fact, as essentially part of our political and social constitution as the liberty of

the press or the liberty of worship; and hence the state protects and encourages all educational institutions; altho, on account of the special religious conditions of America, it has not been deemed wise to devote any portion of the public educational fund to the support of church schools.

Our progress in the higher education has been even greater and more rapid. The number of colleges and of students has doubled in little more than a quarter of a century; while the standard of admission has been raised in nearly all these institutions. The number of those who are doing post-graduate work has risen in the last thirty years from fewer than two hundred to five thousand. Original investigation in the various departments of physical, historical, archæological, and political science has been introduced and developed. Stress is laid on the comparative method of study, and serious attempts are made in the best of our universities to make philosophy serve as a unifying principle for all the sciences, that the scholar may come to perceive that all the branches of knowledge form a whole, in which the parts combine as in an organism; and that, having attained this insight and comprehensive grasp of mind, he may be prepared to take up whatever specialty his talent may point out to him, without risk of becoming narrow, partial, and whimsical, of losing mental balance, breadth, and accuracy of view. In this way, it may be hoped, we shall create an aristocracy of culture, enlightened, reasonable, and benevolent, which shall help to counteract the baneful influence of an aristocracy founded merely upon wealth.

As a result of the diffusion of this more serious education, there is a widespread and increasing tendency to exact a higher degree of culture of candidates for the learned professions. In 1800 there were in the United States but three schools of theology, three of law, and three of medicine; in 1900 there were 165 schools of theology, 87 of law, and 156 of medicine, with about eight thousand teachers and forty-four thousand students. When there is question of education, however, as of anything that is spiritual, numbers have but a minor significance. What is decisive is quality, not quantity. As one mind may outweigh a million, so one school may have higher worth than many. We have had and have eminent men in the several professions, but the average is low, —lower than that found in the progressive nations of Europe; and the standard of professional attainment is no mean evidence of a people's civilization. One who has had no serious preparatory mental training cannot acquire a proper knowledge of theology or law or medicine; and the study of these sciences does not give the intellectual discipline which is needed for their comprehension. A profession is, after all, a specialty; and the inevitable tendency of specialties is to narrow and confine. Hence, whatever profession one may take up, he should first pursue with seriousness the studies which enlarge the mind, which make

it supple, open, strong, and many-sided. A professional man should be a gentleman, and a merely professional education cannot give the culture or develop the qualities which this ideal demands. These truths are gradually making their way among the observant and thoughtful, especially in the professions themselves. We have, of course, no national authority which has power to fix standards for degrees, and these standards vary from state to state. There is a general tendency, however, to demand more thoro preparation of those who seek admission or graduation in the professional schools; and in the last twenty-five years much has been done to increase the science and efficiency of practitioners and to protect the public from the incompetent and unscrupulous. But in many of the states the requirements are still wholly insufficient; and it is greatly to be desired that the professors of theology, law, and medicine should find some way of uniting with the National Educational Association, that the professional schools may be brought into more vital contact with the educational movement of the country. It is altogether probable that the worst teaching is found, not in our elementary schools, but in the institutions of higher education and professional learning, where there is but mechanical repetition of what might be better learned from books—where the methods are those of a factory rather than of a school of life.

In scientific and technical education, in commercial, agricultural, and industrial education, we are making genuine and rapid progress. We are, above all, a practical people, and have the genius and the will to excel in matters of this kind; and the triumphs we have won incite us to more strenuous efforts to surpass, not the rest of the world—for this we have done—but to surpass ourselves.

The aims and ends of practical education appeal to us with irresistible force; they have created our ideals. "We regard education," says Daniel Webster, "as a wise and liberal system of police, by which property and life and the peace of society are secured." Here is the paramount fact: both the school and the church are, in our eyes, chiefly a superior kind of police by which property and the peace of society are secured. The highest good, therefore, is property and the peace of society. They are ends, and whatever else is valuable is so but as a means to acquire and preserve property and the peace of society.

Now, property and the peace of society are desirable, indispensable even, and must be kept in view in every right system of education; but those alone who look above property and the peace of society, and strive in all earnestness to live in the infinite and permanent world of truth, beauty, and goodness, can hope to rise to the full height of a noble manhood.

There is no inspiration in the ideals of plenty and stability. He who would rouse men to the noblest and most fruitful efforts must not make appeal to their love of money and love of ease, but must speak to their

souls—must urge them to labor for enlargement and elevation of mind ; to live for religion and culture, which alone have power to create free and godlike personalities. He must make them know and feel that the whole social organism has worth but in so far as it is a means to fashion individual men into the divine image. This is the ideal of progress, the light which invites, with irresistible fascination, the best to toil for increase, not of riches, but of life ; for the inner freedom, which is life's finest flower and fruit ; and not comfort nor luxury nor art nor science. This is the ideal of religion, which is infinite yearning and striving for God. This is the ideal of culture, which develops endowment into faculty, which gives the mind possession of its powers, making it a self in a world it upbuilds and keeps symmetrical and fair.

Where man has nor opportunity nor freedom to educate himself we have social conditions such as those of India, with its castes ; where education is merely formal and practical we have a world of arrested spiritual growth, as in China.

The fabric of the life of the individual is woven for him by society ; and as he is a creature of society, he is drawn almost irresistibly to what has the greatest social influence and prestige—to power, wealth, and fame. And since only the very few can hope for fame or great power, the multitude are driven to the pursuit of riches, in which there is an element of real power and of fictitious fame, as well as the means of procuring much else that all men hold to be valuable.

Thus ideals are largely determined by environment. What circumstances appear to make most desirable we hold to be the best. Things carry their commands with them, and necessity knows no law.

In America our environment, our fortune, our success, have combined to make us practical, to urge us to the conquest of matter, to mechanical inventiveness, and to the accumulation of wealth ; and hence we believe we may look on religion and culture as valuable chiefly for what they do for the protection of property and the peace of society. But the reverse of this is the true view. Property and the peace of society have as their end the fostering of religion and culture. To live for material things is to live to eat and drink, and not to eat and drink that we may live in the soul, may think and love and do righteously. Food, clothing, and shelter are necessities of our animal nature ; and since they cannot be possessed and at the same time communicated, the labor by which they are acquired tends to beget a selfish disposition—to become a struggle for existence, in which heartlessness and greed take the name of legality, and are sought to be justified by the plea of the force of circumstances, of the nature of things ; and the final result is oppression, hatred, and general disorder, which bring about the loss of property and the destruction of the peace of society. Truth, goodness, and beauty are necessities of man's spiritual nature ; and they are not exclusive, but increase when

they are shared. It is possible to attain them only by genuine and sympathetic communion, by loving God and the whole human brotherhood; and hence the striving for them produces an unselfish temper, a spirit of good-will and helpfulness, the final outcome of which should be a society whose constitutive principle is the co-operation of all with each and of each with all; and which shall lift the race above the conflicts of interests, whether those of individuals or those of nations, into the realms of eternal truth, goodness, and beauty; and thus become a kingdom of heaven on earth, where the aim and end of authority shall be to make men intelligent, virtuous, and free, capable of self-guidance and self-control; where whatever is true shall be also popular; where all shall lead a fair and holy life with God and in the company of their fellows.

Let those who will believe that this can never be more than a dream. It is, at least, the ideal of the noblest souls, and should be that of all educators. But if they are to walk in its light, they must have definite conceptions of the beings whom they seek to develop and fashion. What is man? What is his destiny? What, consequently, should those who deliberately influence him strive to make of him? These are the previous questions to which some definite answer must be found before teachers can know whether what they do be right or wrong. Without such knowledge they can hope at the best to build in the child's consciousness but a fragmentary, incoherent world, not a cosmic whole.

Now, if we are to take a deep and abiding interest in ourselves or in the race to which we belong, we must see ourselves and mankind in God, and not in matter merely. We cannot believe that this life is infinitely good and sacred, possibly we cannot believe it to be a good at all, unless we believe in immortal life. But the teacher derives his inspiration and enthusiasm from faith in the worth of life; and therefore from faith in God, as eternal essential life.

"Education," says Davidson, "should encourage true religion, but it should be free from sectarian bias." A religion free from sectarian bias can mean, I suppose, only a religion without a creed, without intellectual or moral principles; a religion, therefore, which can neither be taught nor loved nor lived.

The phrase "to encourage religion" shows the weakness of the position. If religion is anything, it is the deepest, holiest, and highest; and should be, not encouraged, but striven for and cherished infinitely.

Dr. Nicholas Murray Butler affirms the necessity of religious education; and holds also that a religion without dogma, without intellectual and moral principles, is a meaningless religion. But, having a clear view of the obstacles to a denominational system of state schools in a country like ours, he throws the whole burden of religious instruction on the family and the church. In America, however, a very large number of families have no positive religious belief or feeling. Again, it is the

tendency of free schools to diminish the sense of parental responsibility. When the state or the church assumes the labor and the expense of instructing children, fathers and mothers easily persuade themselves that in sending them to schools thus provided they are quit of further obligation, so far as their mental and moral instruction is concerned; and hence in our country the homes in which no serious religious education is given are increasingly numerous.

There are grave reasons for thinking that the churches are unable effectively to perform this all-important work. But a small part of the children attend Sunday school; and if all attended, a lesson of an hour or two once in seven days can produce no deep or lasting impressions. The result, then, of our present educational methods and means can hardly be other than a general religious atrophy; and should this take place, we shall be driven to confront the problem whether our ideals of manhood and womanhood, of the worth and sacredness of human life, whether our freedom, culture, and morality can survive. Religion and virtue are the most essential elements of humanity, and they can be taught; but they are the most difficult of things to teach, because those alone in whom they are a life-principle, bodying itself in a character which irresistibly inspires reverence, mildness, love, and devotion, can teach them.

This, indeed, is a truth of universal application; for whenever there is question of educational efficiency and progress, the primary and paramount consideration is not methods nor buildings nor mechanical agencies of whatever kind, but the teacher. "The proof that one has knowledge," says Aristotle, "is ability to teach." Whatever is a vital element of one's being, whether it be religion, or virtue, or æsthetic or scientific proficiency, he can teach; and, in the proper sense, he can teach nothing else. We can teach what we know and love to those who know and love us. The rest is drill. They have done most for progress in education who have done most to enlighten and inspire teachers. It is work of this kind that has given Horace Mann his pre-eminence among American educators. Much of his success was due doubtless to his insistence on the practical value of education, on its influence upon "the worldly fortune and estates of men," on its economic worth, its power to improve the pecuniary condition of the commonwealth.

Half a century ago such an ideal had even greater attractiveness for Americans than at present. But Horace Mann made use of his reputation to inspire and enforce better things. He pleaded for the establishment of normal schools, holding that in every system of education the principal need is competent teachers.

The normal schools which have been founded all over the country have rendered important service; but we have passed the point of view of their early advocates, and see clearly that the training which even the best

of them can give is insufficient. The teacher's profession, like every other, is a specialty; and if he have merely a professional knowledge and skill, he is necessarily narrow, partial, and unappreciative of the best. He lacks the philosophic mind, the comprehensive grasp of truth, which, whatever his subject, will enable him to keep in view the wide fields of life and knowledge, and so to guide his pupils to live with greater consciousness and power in their whole being. Hence we shall more and more demand of those who apply for admission into the normal schools that they come with minds seriously cultivated. We have begun to establish teachers' colleges and to affiliate them with our universities, making education a faculty like law or medicine or theology. This university faculty will help us to form a race of professional teachers who shall possess the requisite literary, scientific, and pedagogical knowledge and skill; who shall walk in the light of the ideals of human perfection, and be sustained in their labors by the love of human excellence; who shall understand and practice the art of stimulating thought, awakening interest, steadying attention, and cultivating appreciativeness. "It would be a great step in advance," says Quick, "if teachers in general were as dissatisfied with themselves as they usually are with their pupils."

The divine discontent is that of great toilers who feel that to strive faithfully in a worthy cause is reward enough.

The best school fails in the case of many of its students: great men make themselves great, while the inferior remain what they are in spite of persistent efforts to raise them to higher planes. But such considerations do not discourage the teacher who has faith in the power of education to transform human life; and, if hope deceive him, he cherishes at least a noble illusion, which is a source of joy and strength.

The mother's high thoughts of the future of her child may never be realized, but how much worse for her and for him would it not be if she had none of the heavenly dreams which the love-inspired imagination evokes to make life fair and fragrant! The wise take an exalted view of the teacher's office, and they know the difficulties by which he is beset. He is made to bear the sins of parents and the corruptions of society. His merit is little recognized, and his work is poorly paid. The ignorant take the liberty to instruct him, and they who care nothing for education become interested when he is to be found fault with. The results of his labors are uncertain and remote, and those he has most helped rarely think it necessary to be thankful. But if he know how to do his work and love it, he cannot be discouraged.

And, after all, both he and his work are appreciated now as never before. Teaching has become a profession; and the body of teachers, conscious of the general approval, are impelled to more serious efforts to acquire knowledge and skill; and, in consequence, they exercise an increasing influence in molding public opinion and in shaping the destiny of the

nation. Holding aloof from religious controversy and political strife, they are drawn more and more to give all their thought and energy to create schools which shall best develop, illumine, and purify man's whole being. To accomplish this, two things above all others are necessary: to enlighten and strengthen faith in the surpassing worth of education, not merely as a means to common success, but as an end in itself; and then to induce the wisest and noblest men and women to become teachers. We must help greater and greater numbers to understand and love the ideal of human perfection, and to believe in education for the transformation it is capable of working in man and in society. It doubtless equips for the struggle for existence, for the race for wealth and place; but it does better things also. It gives to human beings capacity for higher life, for purer pleasures, for more perfect freedom. It is the key which unlocks the secrets of nature; it is the password to the delightful world of best human thought and achievement, making the wisest and noblest who have lived or are now living the familiar acquaintances of all rightly cultivated minds. It makes us able to gain a livelihood; and, what is infinitely more precious, it inspires the wisdom which shows us how to live.

The more comprehensive our grasp of the meaning and power of education becomes, the easier shall it be to persuade the best men and women to devote themselves to teaching; for we shall make them feel that the teacher does not take up a trade, but the highest of arts—the art of fashioning immortal souls in the light of the ideals of truth, goodness, and beauty. “A teacher,” says Thring, “is one who has liberty and time, and heart enough and head enough, to be a master in the kingdom of life.”

Education is furtherance of life; and instruction is educative only when the knowledge acquired gives truer ideas of the worth of life, and supplies motives for right living. The teacher's business—his sole business, one might say—is to awaken and confirm interest in the things which make for purer and richer life; for interest compels and holds attention; and interest and attention result in observation and accuracy, which are the characteristics of cultivated minds. If our interests were as manifold as the thoughts and labors of all men, we should all find it possible to approach to completeness of living; for it is easy to live in the things which interest us. He who is shut in the circle of his family or his business or his profession is necessarily a partial and mechanical man, whose relations with God and men cannot be full and vital. The world of his consciousness is fragmentary and hard, not whole and fluid. He is alive but at points. When the flame of his existence is extinguished, it goes out in utter darkness; for he has kindled no celestial fire in other minds and hearts. Such a one cannot be a teacher, for he cannot illumine the mind or speak to the heart; and it is with minds and

hearts that he must forever occupy himself. What is knowledge but a mind knowing? What is love but a heart loving? In books there are symbols of knowledge, but knowledge itself exists in minds alone. Hence, whatever his matter, the teacher looks always to training of mind and building of character, and to the information he imparts chiefly in its bearing on this end of all education. From his point of view, a yearning for knowledge, faith in its worth, in the ability and delight it gives, is more important than knowledge itself. A taste for study, a passion for mental exercise, compels to self-education; whereas one who knows many things, but is indifferent and indolent, forgets what he knows.

Information is, of course, indispensable, and the methods by which it may be best imparted must be known and employed by the teacher; but the end is a cultivated mind, opening to the light as flowers to the morning rays, athirst for knowledge as the growing corn for rain and sunshine. In a rightly educated mind intellectual culture is inseparable from moral culture. They spring from the same root and are nourished by like elements. They are but different determinations of the one original feeling, which, so far as man may know, is the ultimate essence of life. Moral character is the only foundation on which the temple of life can stand symmetrical and secure; and hence there is a general agreement among serious thinkers that the primary aim and end of education is to form character.

As moral culture is the most indispensable, it is the most completely within the power of those who know how to educate. It is possible to make saints of sinners, heroes of cowards, truth-lovers of liars; to give magnanimity to the envious and nobility to the mean and miserly; but it is possible only when we touch man's deepest nature and awaken within him a consciousness of God's presence in his soul; for it is only when he feels that he lives in the Eternal Father that he is made capable of boundless devotion, that his will lays hold on permanent principles and is determined by them to freedom and right.

When men lose the firm grasp of the eternal verities, character tends to disappear, for at such a time it becomes difficult to believe that any high or spiritual thing is true or worth while. Faith in the goodness of life is undermined, and the multitude are left to drift at the mercy of passions and whims, having lost the power to believe in the soul or to love aught with all their hearts. At such a time there is more urgent need that those who have influence and authority should consecrate themselves to the strengthening of the foundations of life; that the young especially may be made to feel that virtue is power and courage, wisdom and joy, sympathy and blessedness; that they may learn reverence and obedience, respect for others, without which self-respect is not possible; that they may come to understand that all genuine progress is progress of spirit; that in all relations, human and divine, piety is the indispensable thing,

useful alike for the life which now is and for that which is to be. Such a fortune as ours has not been given to any other people. Our life sprang from the love of religion and liberty, and, if it is to endure, it must be preserved by the principles from which it sprang; and, if these principles are to remain with us as the vital force of all our hoping and striving, they must be implanted from generation to generation in the minds and hearts of the young.

WHAT IS A FAD?

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There has been a widespread discussion in regard to what has been called "fads in education." The charge is made that public schools undertake to teach too much of what is not necessary, and thereby neglect the essentials. While all agree that fads should have no place in public education, there is the widest possible difference in regard to the question, "What is a fad?" A school fad might be defined as a persistent departure from educational common-sense. Single errors constitute no fad. A fad is a defect which is systematized. It is error masking as achievement or progress.

THE FAD OF "SUPERFLUITY"

Some well-meaning and intelligent critics of the public schools charge that education has run mad by including many superfluities into its course. The so-called "newer studies"—namely, drawing, music, nature study, and art—have to bear the brunt of these attacks. The writer of this paper sent a letter of inquiry to many people. The answers have been used to some extent in this paper. The president of an association of parents and patrons of public schools writes: "In my opinion, the first school superintendent who rises to the occasion and has these 'fads' discontinued in the public schools will win for himself fame beyond any other measure he can advocate." He explains that he refers to drawing and singing.

These studies are not fads in any sense of the word. It is tacitly assumed in such criticisms that it is the sole function of education to prepare for some special business of life. Since only a few children will become artists or musicians, for the great majority who are not to become artists or musicians it is supposed that training in drawing and music is thrown away. This would be an insuperable objection, if these studies did not impart training of human importance and general educational application. Education does not prepare for any special business or vocation, but for life. The cultivation of eye and hand and taste is of importance in all callings. The educational universality of these studies is their defense. In this age even an elementary education should

include some of the elements of science, or the child remains in brutal ignorance of the world in which he lives. Music, in the sense of class-singing, is an element of public instruction that is underestimated by the thoughtless only. Drawing has some features of universal educational value in every school, and in industrial centers it ranks among the important studies. Manual training and lessons in cooking have both social and general educational value; their aim never has been to train carpenters or cooks. While these studies find strong advocates among the thoughtful in the community, and among the teachers, it is proper to remember that they may suffer by being unduly magnified in a course of instruction. They occupy a position essentially different from that of reading, writing, arithmetic, history, and geography. They have neither found such universal adoption, nor have they been given as great a share of time, nor have they rooted as deeply in the approval of public conscience, as the older studies. Moreover, they have not become fully ingrafted or correlated with the rest of the schoolroom work. As a rule, their conduct lies in the hands of supervisors who make this specialty their whole work. In such case their adjustment to the claim of the other educational work is apt, at times, to be neglected, and an undue amount of time and attention may be exacted from teachers and pupils. These studies are of the highest educational value; they may become fads if they step beyond the limit of their general educational usefulness.

FADS OF ECCENTRICITY

This class of fads may be made clearer by an illustration: A few years ago some person suggested that the daily rotation of the various studies in the program was objectionable, and that, instead of an hour in arithmetic, followed by an hour in geography, and perhaps an hour in history, a different division of time was preferable. Consequently, he undertook to teach all the arithmetic of the school term by taking five weeks' solid work in arithmetic at the rate of five hours a day. Even this idea had some followers.

The words "fad," "frill," "fringe," which are used frequently as synonyms, apply to this class with particular force. The idea underlying them seems to be that of fashionable ornament in contrast with plain dress. The idea of fad often carries with it the suggestion of personal vanity, a manifest desire to attract attention by appearance rather than by merit. There is a "sport" with new things which takes possession of its votaries and makes them lie in wait for things novel and strange.

It is characteristic of this kind of fads, as well as of others, that they are launched into the world with liberal promises of the important results which they will accomplish. The fad's reason for existence lies in the promised achievement of the future rather than in the experience of the past or the needs of the present.

FADS OF THEORY

The existence of fads in modern education is by no means discouraging. Zeal and enthusiasm are in evidence in all of them. Not a few of them arise from the very wealth of educational thought, and from an abundance of ingenious theory. Fads are at times evidences of great interest in new educational theories which, while not always expressed in terms clear and conclusive, are, for that very reason, for some, fascinating and attractive. One should imagine that the hopeless entanglement which stares us in the face in the discussion of new and old education, of the new studies and the three R's, of prescribed courses of study or individual plans, should be in itself enough to make the teacher withdraw from the path leading into quagmire, and keep to the broader road of conservative teaching. But mysticism never lacks disciples.

Much error has arisen from a mistaken idea of the function of the school, which I take to be the development of power thru instruction in the conventional studies. Public opinion would probably classify as a fad the attempt to "develop power" to the exclusion of reading, writing, and arithmetic. School education is an unfolding process. But it is more than the unfolding of what is in the child. Knowledge from without, and experience and life from without, must be carried into the child-soul.

The child is not the self-contained aim and orbit of education. Education comprises a larger world. It is not correct to say that the child is educated for himself; he is educated for manhood. He is trained, not for what he is, but for what he shall be. There are in him childish ways which must be cast off and rejected in the process of education. Childish life and thoughts are scaffoldings which are discarded as he advances. Education has to bear constantly in mind the idea that the requirements and duties of adult life, the ideals of true manhood and womanhood, form the aims of child education. On the other hand, the ways and means, and the processes, of education are fixed by the natural conditions of child-life. The aim lies in the future; the means are determined by present conditions. Childhood is naturally the happiest time of life, but the incidental aim that education should make the child happy would be but a poor substitute for the greater aim, namely, the happiness and strength of the adult. The educator should not, cannot, without educational hazard, step down and lose his own identity in his otherwise proper endeavor to adjust himself to the child's life and ways. He must stand erect and kindly lead the child to walk with him toward his future. He adjusts himself to the child so far only as it is necessary to introduce him to the serious purposes of education. School education should be childlike in its simplicity and clearness; to make it childish in tone or subject-matter would be a fad.

Whenever school education separates itself from instruction, and

"development of faculties" is divorced from the pursuit of serious study, then the fad makes its appearance. Among many of the great sayings of Herbart, none is more important than his remark: "I confess that I can not realize education apart from instruction."

While the older methods of education had to be reminded constantly that "all work and no play makes a dull boy," there are some well-meaning, progressive, and vigorous teachers who must be told constantly that "all play and no work will not make a man."

A reliable eyewitness gives the following account of a visit she paid to a room in a large school: The morning began with what is called an "observation lesson." The children were encouraged to relate what they thought noteworthy of their experience of the previous evening. One of the children related that they had an evening party at home, that they lived upstairs, and that they had carried up two kegs of beer; that when they were thru with this they had carried up a keg of whisky. They had a very good time. The teacher, very wisely, said at this stage: "Now let us hear from some of the other children." (I beg to remind my audience that this is a report of an actually observed morning.) The second series of exercises consisted in games fashioned somewhat after the kindergarten games. The next was the naming of classic pictures. Pictures pasted on cards (Perry pictures, if I am not mistaken) were held up in rapid succession, and the class supplied the name: "The Pharisee," "Correggio's Madonna," "Thorwaldsen's Evening," etc. The next exercise was one in posing, the children imitating, by the way they stood, certain pictures which they had seen. Thus one boy stepped forward, looked about for some object, took hold of a feather duster, and, leaning on it, one end of it on the floor, he looked up with a set expression in his face. The class shouted, "The man with the hoe!" The next exercise was called "rhythmic movement." Ten children danced the Virginia reel and eight children the lancers. The next exercise, finally, was one in practical reading. A sentence was exhibited quickly, and the children then gave the words of the sentence. I have no doubt that the rest of the day, after the visitor had left, was given to the various traditional work of the schools.

FADS OF EXAGGERATION

Aristotle defined virtue as a means between two extremes. Thus he thought that wise economy was a virtue, while those who practiced too much or too little economy, the miser and the spendthrift, represented the extremes of vice. In a similar way the correct educational practice or idea is capable of abuse and exaggeration, and the result is a fad. A fad, in this sense of the word, is a practice which carries some valuable idea beyond reasonable limits and proper proportion. Thus, Pestalozzi's idea of objective teaching was a great step in the progress of educational

science and practice. No lesson is more easily learned than when it can be taught thru the eye. But the correct and beneficial principle of objective teaching may be carried to such an extent that it becomes a harmful practice. In arithmetic, for instance, the real value of the study lies in the power of mathematical inference and deduction. While all arithmetic work begins with the use of objects, and while many of the new steps, even in advanced work, will gain by objective illustration, these must be discarded as soon as they have answered their purpose, and mathematical reasoning must take their place. Objective teaching, whether it be called by Pestalozzi's old name or by the more modern names of visualizing and aurizing, if carried to the extreme, may become a harmful practice. Children are thinking beings, and it is proper for the teacher to take it for granted that not everything must be objectified and "visualized" and "aurized." It was the mistake of the instructor in a room visited by one of our teachers to try to visualize the perfectly plain story of the two goats who tried to cross from opposite directions a plank bridging a creek, and began to butt against each other. The teacher "visualized" the story by selecting two children to act the part of the goats.

The great aim in all instruction in reading, from the primary grade to the highest, is that the child should see thru the words and the forms of the printed page, and have his mind steadily fixed on the ideas to be conveyed. The application of the idea, however, at present in use in some school in one of the large cities is by no means free from objection: in order to be quite sure that the children read words instead of ideas, all reading aloud has been abandoned. The children read silently, and show that they understand what they have read thru oral and written recitation.

No more legitimate demand can be made on the school than that of concentration, in the sense that there should be, as much as possible, a connection established between the various branches of instruction—that they should mutually supplement each other. But even this valuable idea may become an error if carried beyond the limit of common-sense. A lady reported to me the following incident: A teacher who prided herself on correlating all subjects in the school curriculum began her day's work with an observation lesson on apples. This was followed by a reading lesson on apples, after which the children took their seats and wrote about apples. Next, songs about apples were sung. Apples were then divided and used to teach fractional parts. As it was now time for drawing, the children were sent to the board to draw apples. Soon the board was filled with all kinds of apples, known and unknown to the horticulturist. One boy, however, instead of drawing an apple, drew a horse. This breach of discipline, or violation of correlation, could not be passed over, so he was asked why he had drawn a horse instead of an

apple. The boy replied: "Oh, I'm tired of apples, and so I drew a horse to eat all the apples up."

There is some merit in the co-ordination of studies, as well as in concentration. Each study is, in a measure, a complement and corrective of the other. Each must stand related and subordinate to the rest. Each answers an educational and an objective purpose. Each cultivates a special kind of activity. If any one study is raised to inordinate importance, or if it is deprived of the corrective influence of the other, harmonious education is endangered. Language ranks easily first in the common-school course, yet, if literary studies were exaggerated without being corrected thru the touch with life, with nature, or thru the exactness and precision of mathematics, mental development would tend toward the verbal, the fanciful, the imaginative, and the dreamy. Literary studies, with their wide horizon, their possible tendency toward the imaginative, the diffused, and the indefinite, need the counterbalancing influence of the precise terseness and close deduction of mathematical studies. Equipoise and balance in the studies of the curriculum are needed as much as concentration.

ORIGIN OF FADS

Fads have presumably existed under some name or other since the beginning of education, but their growth has perhaps been more marked in our own days than in former times. A person fond of paradoxes might say that fifty years ago the art of teaching consisted of matter alone, without much method. The learning of the data of information proceeded without the use of much pedagogical art. On the other hand, it might be said of the present time that in some places the art of instruction is all method and little matter. The data of information are overshadowed by the skill of the teacher and by illustrative and explanatory devices. The machinery receives more attention than the output. The rigid course of study of the old school, as it existed thirty years ago, the regular examination of classes by principals and superintendents on the subject-matter of the lessons, allowed very little latitude for growth of education weeds or fads.

Where a certain kind of school work, defined in quantity, is prescribed and must be accomplished within a reasonable limit of time, instruction is not likely to lose its concentration and force. While there are grave objections to a hard and fast course of study extending to every detail, it may, nevertheless, be said in favor of the old course of study that it was a safeguard against fads and whims.

FADS OF ROUTINE AND TRADITION

The teacher of the present day is not wholly responsible for the superfluities in modern instruction. Some of them have been bequeathed to him by the past. Some of the studies of the curriculum are burdened

with topics and subdivided subjects which answer neither any specific educational purpose nor any demand of life. In one of the best monographs published during the current year on the essentials of mathematical teaching the author shows how the peculiar mercantile conditions of the Middle Ages, when the study of arithmetic first came into use, and when the earliest text-books were written, led to the insertion of certain topics in arithmetic which were then useful, but for which, with the changes in modern life, every necessity has passed away. These topics have survived in text-books for the sole reason that they were part and parcel of former books in arithmetic.

PUBLIC-OPINION FADS

Public opinion has not infrequently abused the term "fad" and branded with it almost every progressive movement in education. When I asked a prominent teacher, "What is a fad?" he answered promptly: "Anything is called a fad which is done in a way different from that in which somebody was taught when he was a child."

Perhaps the most dangerous fads are not of the teachers' creation, but originate in the community itself. The many fads which must be put to the account of teacher and superintendent are sad enough, but they do not begin to be as pernicious and long-lasting as the harm that may be done when a strong and masterful man, with a hobby gets into a leading position on a school board, and drives his fellow-members before him in the narrow path of his special fad.

The people are collectively honest, and their verdict is wise. Opinions of classes and individuals, however, no matter how loudly or emphatically expressed, are at times unwise. The history of past decades has seen the rise of many, and the decline of some, of the fads of this origin. There is, for instance, the faddish idea that a laborer needs no education, that workmen are spoiled by too much schooling; there is the "three R" fad; there is the "education makes criminals" fad.

The claim that spelling should receive a proper amount of attention, and is an important part of public-school training, is valid. If the demand is made, however, that to this study an undue amount of time and attention be given, even spelling may become a fad. Drill in spelling is a mechanical device, and in the poorest imaginable school mechanical drill is always most prominent.

The "quick promotion" fad has done immeasurable harm. Children, against the wish and view of their teacher, have, in places, been forced into higher grades than the one for which they were fit, and their educational progress has been impaired and ruined thereby. The teacher and principal who in such cases quietly and pleasantly, but at the same time firmly, stands his ground is a blessing to the child and to the parent. One cannot help thinking in this connection more leniently of Rousseau's paradox: "The aim of education is not to gain time, but to lose it."

One of the worst fads of our day is the "extreme indulgence" fad. The practice is bad which lets the child have his way when he is unreasonable, and lets him regulate his relations to school and home in accordance with his pleasure instead of in accordance with clear duties. "I wish you would make him come to time," said a kind mother to a teacher who had sent for her on account of the frequent tardiness of the child; "but the fact is, I cannot make him get up in the morning, and he will not go to bed when it is time." If the parent abdicates the educational control of his child, he makes a pernicious error and indulges in a common, but objectionable, fad. The child must be taught to be faithful to his little duties as soon as his power in any direction is adequate to this educational demand.

CONCLUSION

Many of the idiosyncrasies and petty errors may be avoided by dwelling on the universal principles of education and by subjecting all innovations to the test of universality. The schools are common schools. No practice or study which is serviceable for specific walks of life alone can find, legitimately, a place in public education.

The good sense of the American people, and of American teachers, has thrown enough safeguards around the public schools to prevent fads and petty errors from becoming universal. The task of the school is to concentrate its efforts on the recognized subjects of instruction. Growth must proceed thru the acquisition of information. Progress does not lie in the increase of studies, not in the excess of data, but in the definiteness of ideas, the logical grouping of facts, the clearness of insight, and the gradual strengthening of judgment. When new studies or practices are introduced for educational reasons, the teacher must be ready to account for the same to public opinion. The aim of education is not merely to prepare for life, nor is it merely to develop power. Each of these aims, taken separately, leads to error and fad. Their joint and universal consideration constitutes harmonious education.

DISCUSSION

WILLIAM K. FOWLER, state superintendent of public instruction, Lincoln, Neb.—A school fad is a part or a line of school work with which one is not in full accord or sympathy, thru ignorance of its purport or on account of an honest difference of opinion. With many, a fad is a moving from the letter *r* up or down the alphabet. It is a schoolroom innovation in the experimental stage. It is an advance breeze from the progressive educators of the Windy City. It is a perennial topic for a Chicago newspaper editorial. It may be a good thing, spoiled in the house of its friends. It may be the result of misinformed, misdirected, or misapplied energy. A fad or innovation may be harmless in the

hands of its originator, but very harmful with some base imitator. It is a layman's exterior view of a part of the school curriculum, viewed disconnectedly, and not only thru a glass, darkly, but oftentimes thru a stone or brick wall.

Fads vary in degree, in the elements of time and locality. They vary in continuity and in regularity. They are different things in different times at different places. They have their exits and their entrances. They come and go, as do the measles. They may be in the full glare of the footlights or behind the scenes. Time alone proves their value or their worthlessness, and that which is righteously dubbed a fad will fade as a fashion of the hour.

A fad's advocate is called a faddist. Faddists are of two kinds—zealots and advertisers. The former require protection, caution, sound counsel, a "blend," and "discreet-mination." The latter require exposure—long time! A faddist may be a crank or an enthusiast.

Fads are of two kinds, ephemeral and eternal, and mortal man, be he editor or educator, cannot always classify them. A fancy today may be a fad tomorrow, a foible the next day, and, in the hands of some unbalanced enthusiast, a fool-thing thereafter. A fad is sometimes dubbed a frill, a fringe, a flowery or a floury thing; but others, who do not feel bound by the alliterative *f*, deem it a weedy thing or a bit of pastry. The fad we are to discuss, however, is now in the schoolroom, and either has no place there or, what is more likely, is exaggerated temporarily beyond its relative value.

We do not now consider geography a fad, but the courtiers of Isabella of Spain said that subject was a fad with one Christopher Columbus. Some 150 years later free education for all the people was a fad in New England.

A half-century ago the Spencerian system of penmanship was hailed as a fad; it was opposed because it was said to destroy individuality and character in penmanship. Today the vertical system is termed a fad and opposed for precisely the same reasons; but the one had and the other has a mission to perform; each was a distinct step in advance; each received or will receive modification, but each systematized the work and called attention anew to a most important subject.

United States history can hardly be classed as one of the older, highly approved, deeply rooted subjects. The Northern Indiana Normal School dates its inception from the introduction of United States history into the public schools of Indiana. Ten days ago only it became a requirement for the lowest grade of teacher's certificate in my own state.

Music is sometimes and in some places termed a fad. But the fifteen minutes daily of instruction in vocal music in the schoolroom has a distinct temporary and a permanent value—we may say it has a temporal and spiritual value. Condemn sooner the two or three hours' daily instrumental practice in the home.

In many central states the consolidation of small rural schools and the transportation of pupils by public conveyance may be considered, and is sometimes termed, a fad, but it is a fad that will grow in favor as its advantages are better understood by the public. Whatever tends to improve the rural schools and to keep the boys on the farm should receive universal approbation, be it fad, fact, or fancy. Sanitary and hygienic and attractive schoolrooms are fads in some quarters, and this is a fad that should be universal.

In Nebraska at present the elements of agriculture, including a fair knowledge of the habits and structure of the common plants, birds, insects, and quadrupeds, are a fad, perhaps, but that great agricultural state will instruct its youth thoroly in the causes and dependencies of its commonwealth. Last winter the legislature of Nebraska, in its wisdom, adopted a knowledge of the elements of agriculture as a requirement for a teacher's second-grade county certificate, and rejected a knowledge of the rudiments of vocal music for the same purpose. Which was faddism?

I regret that I cannot agree entirely with Dr. Soldan's statement that "no practice or study which is serviceable for specific walks of life alone can find, legitimately, a place

in public education." I would not teach agriculture in the schools of New York city, but I like better President Charles F. Thwing's statement: "What the world needs is not narrow specialists, but broad men sharpened to a point."

Dr. Soldan says that in a certain school loud reading has been abandoned altogether, and silent reading has taken its place. On the other hand, in certain schools elocution has been adopted in the grades, and in others oratory forms a part of the high-school course. Of the two evils, or fads, give us the latter. Fifteen county superintendents in my own state, whose institutes I visited last month, were unanimous in the opinion that reading was more poorly taught in the rural schools than any other subject. Give us back the good old-fashioned oral reading, "The Boy and His Burning Deck," "Marco Bozzaris" and "The Advantages of Adversity," Hamlet's soliloquy and "Lochiel's Warning," John Adams' supposed speech and Emmet's "Vindication." Send to the high school pupils who can read easily, pleasantly, expressively; pupils who have mastered the mechanics of reading, even tho they may not have read all the great mass of English literature or all the myths of ancient Greece.

Broadening is all right, if the depth is not affected. Floating idly on the surface may be pleasant, but the floaters should know how to handle their oars, with a long, strong, deep, even pull, as well as how to feather-spray.

Drawing and elementary science are not fads, and they have a distinct economic value in industrial centers. Manual training in its various phases, domestic science, etc., may or may not be fads, according to local conditions.

Extending the department-store plan of the great universities and colleges down thru the high schools into the grammar grades is, I fear, a dangerous fad, with the prospect of waiting for our change indefinitely increasing and the change itself growing less than two-bits.

The experimenting in the schoolrooms of a city may not be the general practice there, and the general practice in a city may not be followed or copied elsewhere. In the public mind and eye fads are unduly emphasized. Where fads exist, however, may be found great educational thought and activity. Fads do not thrive in slimy pools or under moss. I believe the great rank and file of teachers should not ape faddists. They can be progressive and studious in their profession, and yet conservative. Let others experiment while teachers teach.

Less than one hour in eight is passed by the child in the schoolroom when he attends regularly thruout the school year. The average attendance would not equal one hour in twelve. Perhaps there are fads in the home, on the street, in society, that influence the child, for good or for ill. Society may claim our youth for social functions, pink teas, and midnight revels, while the school is endeavoring to train for better citizenship. And in which is the average home more interested, the social function or the schoolroom?

Our schools for delinquents and defectives are now striving to give each individual therein that equipment which will enable him to live an independent life in the world, and the public schools should do no less—they should do more; that which they do in the direction of developing and strengthening an earnest desire for better living, for honest labor, for higher citizenship, for independence, for self-reliance, is *not* faddism.

"God give us men! A time like this demands
Strong minds, great hearts, true faith, and ready hands.
• • • • •
Men who possess opinions and a will;
Men who have honor and who will not lie."

Strengthen the will, develop purpose, build up character—these are not fads. The results will be a true measure of the success or failure of the public-school system and its legal guardians.

IS THE CURRICULUM OVERCROWDED?

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In spite of the varying opinions of teachers and others upon the scope of the curriculum, upon the relative importance of interest and duty, methodical drill and incidental use, thoroness and superficiality, there is a striking similarity in published courses of study. In them all we find practically the same subjects. There is no duly constituted authority to regulate this matter, as in some other countries. Each school district and each city may do as it chooses, yet all choose alike. It must be that they do so in response to a well-defined demand of some sort, and the demand must be general, since the response is general.

The curriculum of two decades ago will not now satisfy the public. The studies then called special, and not by any means generally taught, as music, drawing, gymnastics, manual training, and elementary science, have ceased to be special and have become universal. They have become interwoven with the general fabric of school work, and are to a large extent taught by the regular teacher.

Is the curriculum overcrowded? The answer which anyone makes to this question will depend upon his conception of what the school is for, and how its curriculum is to be interpreted. If every child is to master everything mentioned in the course, if he is "to eat straight thru the bill of fare," then school life is all too brief for its accomplishment. Just as in dining, if we would be comfortable we must select something that we can "eat and forget," so in study it is futile to attempt to remember everything that contributes to mental growth and health.

In New Jersey, in 1826, it would seem that a far different idea prevailed. Looking over some accumulated family treasures, recently, I saw the original certificate of which a copy is here given. It is a testimonial seventy-five years old, the paper yellow with age, but the writing still legible. As a souvenir of old-time ideas it is interesting:

CERTIFICATE

Elizabeth Crane has been engaged during her attendance at this school in storing her memory, that strong and capacious storehouse of mankind, with useful ideas—lessons and information generally.

Pursuant to this end, she has deposited in her memory for future use the multiplication and other arithmetical tables.

She has repeated the principal divisions—oceans, islands, etc.—and answered one hundred and nine questions on the map of the world.

She has recited the principal divisions—lakes, rivers, bays, gulfs, etc.—and answered forty-one questions on the map of North America. She has defined the boundaries of twelve of the United States, and repeated ninety-five of the chief towns and thirty-three of the principal rivers belonging to those twelve states, and answered eighty-six questions corresponding to the geography of that fine country.

On the map of South America she has committed to memory the different countries belonging to that great peninsula, and repeated fifty-eight chief towns and thirty-three of the principal rivers, and answered thirty-nine questions corresponding with its geography.

Let no one say hereafter that females cannot learn, for that is an assertion without foundation.

Elizabeth is a living proof to the contrary, and she merits the approbation and encouragement of her parents and friends.

(Signed) P. WARDEN.

MORRISTOWN, N. J., March 8th, 1826.

Elizabeth Crane's curriculum evidently included geography and arithmetic, and certainly reading. This is no long array of subjects, yet I submit that Elizabeth's curriculum was crowded with too many tables and boundaries, peninsulas and capes. We are comforted, however, by the thought that Elizabeth demonstrated a fact of value to her sex in the discovery that "females can learn."

The old idea that memory is the only faculty to be trained, that the mind is to be stored with facts solely for future use and without reference to present significance to the child, has not yet wholly disappeared. Much of the present criticism of the curriculum is based upon the memory idea. But the accumulated wealth of civilization has become too great for the memory alone. The children are heirs to a very large estate. We can show them the entrance, and for a little while we can serve as guides, but the main thing is to inspire them with a desire to continue its exploration and give them power to use its resources. One of the recent utterances upon this subject is as follows:

"I am fully convinced that the most urgent need of our public-school system today is more thorough work in elementary subjects, such as language, arithmetic, history, and geography. The truth must be faced," says the writer, "that these subjects are neglected in the everlasting, never-ceasing pushing of a child into the higher grades. . . . The craze for enriched curriculum is indulged in at the expense of essential drill in the so-called common branches."

There is, no doubt, much truth in the statement that faulty syntax, bad spelling, inaccurate work in arithmetic abound. It has always been thus. School children have always made mistakes, and they always will. Education is a life-work, and we hope, also, a work for the life to come. Even in 1826 the memory, "that capacious storehouse of mankind," had its limits. Elizabeth Crane, it will be observed, "defined the boundaries of twelve of the United States." There were at that time twenty-four in all; therefore, in boundaries we shall mark Elizabeth but 50 per cent. We are unable to determine P. Warden's standard in the matter of tables and rivers, cities, lakes, bays and gulfs, peninsulas and capes, as it is not quite certain how many had been discovered and explored at that time. But I think we may be satisfied that Elizabeth's attainments in these other highly important items were at least commendable. It is safe to

assume that every bay and peninsula of any respectability engaged the attention of this industrious New Jersey maiden.

In these days we have found it sufficient to know where to find some of these important items of information. Memory is only a good beast of burden. What we want is strength of mind and character, good judgment, power to do and disposition to do. The good school will train its pupils to remember, because without your facts you cannot carry on your train of thought. You must have facts, but the great work is to train to use facts in effective thinking and expression. The school of today does not seek so much to get set answers to questions as to get questions asked. It aims to secure vigorous, interested effort, to make the mind strong rather than full. To that end it places before teacher and pupil a curriculum which is quite extensive, since varied needs must be met. The school must do much more for some children than for others, because the home does less. The school must furnish the fund of useful information which the home fails to give. It must restrain selfishness and develop self-control. It must erect barriers against unwholesome influences. It must do these things, or they will remain undone. In many instances the school has to stand for so many of these things that the sum of education which the children receive is much less than that possessed by the normal child of the same age or grade who comes from a good home.

Within certain limits the teacher decides what typical portions of the work outlined are most needed by the pupils under her care. No one else can tell so well. Individuality must be known as well as present attainment in the particular work. The curriculum is a guide to the selection and sequence of material, rather than a prescribed amount to be done. No matter what mechanical devices we may employ as schemes of classification and promotion and short intervals between classes, as in the present highly developed graded system, our pupils pass along, some faster, some slower, but no two getting exactly the same benefit. Each takes what he is capable of assimilating, and no more, and he cannot take it before he is at the proper stage of mental growth. By trying to get him to do so we waste time that might be more profitably spent. It is right here that the crowding occurs.

The trouble is, not that the newer studies have been added, but that some of the older ones have not sufficiently given way. We have been pruning away at arithmetic for the last ten years and have dropped out some of its useless applications, but we still devote too much time to it in the early years, and accomplish in the eight years what might be easily done in the last four. This is partly the fault of the makers of the course of study, and partly the fault of the compulsion practiced by public opinion, which still regards a knowledge of arithmetic as a necessary preparation for earning a livelihood, and therefore insists upon our teaching long division to infants and cube root to those who will never use it.

Arithmetic is of value chiefly for its logical elements. Training for mere facility is a waste of time. There is no advantage in the limited facility acquired in school. The small Italian fruit vender, thru street practice alone, can do much better than our well-drilled schoolboy. He gains his facility in purposeful practice in a very short time. Our grammar-grade boys cannot work with the rapidity and accuracy required in a bank. You cannot. I cannot. But once actually have it to do, and how quickly the mechanical skill is acquired!

I would say, then, that the curriculum is overcrowded by whatever it contains that lacks wholly the element of present use to the child. The time to learn the table of linear measure is when it is needed in constructive work of present value from the child's standpoint. Then he remembers it without endless drill. There is no virtue certainly in needless drill. The time can be far better occupied.

We read that in 1826 Elizabeth Crane "deposited in her memory for *future use* the multiplication and other arithmetical tables." There is much of this work going on today, not only in arithmetic, but in other subjects, and just to the extent that such purposeless work is done, or work with a purpose so far in the future as to be out of touch with the child's life, just to that extent is the curriculum overcrowded.

The demand for thoroness in elementary subjects is reasonable and ought to be heeded, but the demand must be interpreted with due regard to the maturity of the student. The graduate student in the university devotes his attention to a very few things, sometimes to a single branch of one subject. Here thoroness is a reasonable expectation. But, in the lower primary grades of the public schools, we shall not secure thoroness by limiting the child to a narrow curriculum, nor in any other way, and simply because his brain has not arrived at that state that makes thoroness possible. Thoroness in the child's early school years is a physical impossibility. His interests are varied, but not deep; therefore, in the early years the curriculum may properly be quite comprehensive as to topics. As we go up in the grades, however, and have minds more and more mature to deal with, there is a constant approach to thoroness accompanied by a narrowing of the curriculum. The child in the upper grammar grades studies fewer subjects than the child in the grades below, but he goes deeper. In the high school he is restricted to three or four subjects, but he has by this time gained sufficient power of concentration to be able to hold himself to the work. Later, when he has reached the university, his brain has become so good a physical instrument that his work can be narrowed still further. He is then prepared to select some one thing for a life-work.

The curriculum, from the kindergarten to the university, may be compared to a pyramid, with the kindergarten at the base and the graduate school of the university at the apex. From the base upward there is a

gradual narrowing in subject-matter with increase of thoroughness till the apex is reached, at which point only can absolute thoroughness be expected. A curriculum thus arranged may seem crowded; but, if so, the fault lies with those who administer it.

Because children, tho classed together, come to the school with such varying amounts of general information; because they represent such extremes in their mental furniture, a closely prescriptive curriculum, just extensive enough for classes in one portion of a city, might be quite unsuited to classes of the same grade in another portion of the same city. There must be as many courses of study as there are essential differences in population, or else there must be one course extensive enough to meet varying needs. The tendency has been toward the second of these plans. Selection of material must be based, not only upon a full knowledge of present attainment of the class to be taught, but also upon facilities at hand for teaching one topic rather than another.

This selective work presupposes a skillful teacher, but often the novice or the unskillful teacher is our only resource. This will continue to be so until our teaching force is recruited from the ranks of pupils now in schools receiving instruction from skilled teachers, for, in spite of training schools, we teach as we have been taught. The evolution of the teacher is a slow process. We shall not hasten it by narrowing the curriculum, or making it more prescriptive. The teaching force will increase in efficiency only as responsibility is imposed and accepted. The true kindergarten is the effective educational instrument that we find it today because of the thought put into the program daily by the teacher. The work is planned daily to meet the demand of the season and of the class. So it must be in the school, if satisfactory results are to be expected. The curriculum must afford ample material. The teacher must make appropriate selection.

The attempt to impose a uniform scholastic standard of promotion from grade to grade is responsible for much of the current feeling about the curriculum. Some children get less than other children from the same studies. Some people get less out of life than other people do, yet all are equally entitled to live the life and to make it as full as individual capacity permits. The standard for promotion must not be rigid. Each child must go thru the school, taking given subjects at the time when they are suited to his age and brain development, and therefore in harmony with his interests. He must not, if very old for the grade, be required to wait till he has attained a high degree of success in every part of the work just preceding. If we hold such a child back, we very greatly diminish his prospects for an education, and he probably drops out of school altogether. A teacher who insists upon the same attainments for all pupils in a class, irrespective of the home environment, causes an innocent and unoffending curriculum to seem much crowded, and he should have his attention called to the fact.

In our high schools the time has long since passed when pupils, without regard to their powers and purposes, are held to a single course of study. Two plans are quite common. One offers choice of courses; the other, choice of subjects. The one allows substitutions; the other establishes constants. The two plans, therefore, are very much alike. They differ in this particular: one tolerates selection of studies; the other makes selection of studies the rule. In neither case can the charge that the curriculum is overcrowded hold, where, as is often the case, graduation requirements are stated in units of work instead of in years spent in school; since, under such a plan, the student can regulate the number of studies that he will carry at any one time by his mental and physical power. There is no good reason why all pupils, without regard to ability or health, should spend just exactly four years in completing a high-school course. Some may need more time, some less. Each should find it worth while to put forth his best efforts, yet no one should be obliged to take more studies than he can pursue with success.

By way of summary, it may be said that the curriculum is what it is by reason of public demand. A curriculum is not necessarily crowded because it contains many subjects. The old narrow curriculum was overcrowded with things not worth remembering. Skillful teaching renders the old and the new mutually helpful, each serving the other. The curriculum is none too broad to meet varying needs; therefore, rightly interpreted and used, it is not overcrowded.

HOW EARLY MAY HANDWORK BE MADE A PART OF SCHOOL WORK?

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If the title of this paper, suggested by our honorable President, were a little different, it would, in some ways, be easier to answer. If the question were, How early *should* handwork be made a part of school work? I should answer most emphatically: "At the beginning."

If there can be any question as to the place of handwork in the school, it seems to me that it must be as to its extension upward, but surely not as to how early it should begin. Every consideration of child nature points to this answer. How can we raise such a question when we look at the natural child and see what an enormously important influence handwork plays in his mental development; when we see how, in the very early years, his knowledge of the material world is largely built up by muscular contact; and when we see, a little later, how the chief expression of his crude, but vivid imagination finds vent in constant material and pictured creations?

How can we ask such a question when we recognize the important place of handwork in the kindergarten and acknowledge the significance of such work at this stage? Does child nature utterly change at the entrance to the primary school, or is the school instruction at this point to separate itself from natural education and to recognize only one side of child nature? Surely both of these questions can have but one answer. We know that a large part of the mental life of the boy and girl of the primary school is still concerned with the gathering of impressions of the material world, and that it is the reflection of these impressions that fills the imagination and fixes the ideas of this period. We know also that these ideas and images tend to flow out in objective, tangible, and concrete creations; that this giving out is but a phase of the coming in — a natural and inevitable reaction that is part of the life-current; and, further, if we put these facts together, and if we have come into any sympathetic knowledge of young boy and girl life, we realize that all this means that such creations are absolutely essential to the full expression of the mental life of the boys and girls of the primary-school age; and, if we leave *these* out of the schoolroom, we are leaving out, at the same time, a large part of the life natural and essential to such children.

The problem of the elementary school today is, I conceive, to make the life of the school more real; more an epitome of the kind of thinking, feeling, and doing that obtains in real life; more a reflection of the actual life outside of the school walls. If this be so, then all the natural elements of that life must be represented in the activities of the school. To attempt to reproduce real life for boys and girls of the primary school without the element of handwork would be like the play of *Hamlet* with *Hamlet* left out; it would be like the attempt to teach a boy to swim without letting him go into the water.

But handwork will not be a life-element in the school, unless it is used in a natural way. It will do comparatively little to make the school life more real, if it is conceived of as mere manipulation and used as a mere drill. Handwork, whether drawing, painting, modeling, or construction, as a natural feature in school work can never be a thing in itself. It is a part of a whole. Its different forms are simply means of putting thought and feeling into form and action. More than that, if the handwork is to be wholly worth while, the thought and feeling back of it must be genuine and worth while.

As the expression of natural motive and real thinking, on the part of the worker, handwork represents, with the pupil of the elementary school, one of the most natural and intense forms of living. In this relation it is one of the most effective agencies for developing both knowledge and capacities. In any other relation, its value as an element of school work must necessarily weaken and diminish. Work of this character evidently cannot be a matter of blind copying of something placed before the

pupil. If it is to be in any sense true self-expression, it must deal with undertakings, on the one hand, that represent real interests to the particular workers involved, and, on the other, it must be prosecuted in such a way that the worker's own thought enters in some part into the result. Handwork of this kind by no means implies lack of care or faithfulness in its execution. On the contrary, it means the maximum of care and faithfulness, because it means the maximum of motive.

To bring the element of self-expression into handwork does not mean that we are to turn the pupil loose to exercise whim and fancy unrestrained. In handwork, no more than in any other form of school work, should the pupil be free from suggestion and guidance by the teacher. And, on the other hand, self-expression does not mean that the pupil is expected to develop the entire plan and design for each thing done. This would be too much to expect from the unformed standards of judgment of young children, and could only result in crude projects and unsatisfactory work. But recognition of this element may mean that the general plan to attain an end will be developed from the pupils. It may mean the adjusting and modifying of details within this general plan by the individual pupil; and it may mean the working out of ways and means to achieve this plan. It may mean these or many other things, but it should always mean that the worker's own thought and feeling are contributing in a real fashion to the end for which he is working.

When we take up the problem of handwork in this spirit, we are going to recognize that a nice sequence of difficulties in the work may be of less importance than the question of motive or the significance of a project to the real interests of the particular moment. Accuracy and precision have commonly been referred to as the essential qualities of all educative handwork, but accuracy is natural only when its necessity is appreciated by the worker, and this will be the case only to the degree that the need for accuracy is perceived to be an inherent condition of success in the task, and not as a quality imposed from without.

Such natural expression thru handwork cannot take the form of set courses. It must be a matter of adaptation and relation to the life of each particular school. Both the in-school and out-of-school interests of the particular children dealt with must form the basis for such work. This means infinite variety and flexibility. Handwork of such a kind will take as many forms as there are classes to be taught and teachers to teach them.

In relation to the school interests, or, more specifically, to the course of study, handwork represents emphatically a method rather than subject-matter of instruction; and it is in this sense that such work finds its most natural place in the lower grades.

No catalog of the possibilities, in this direction, need be given; painting, drawing, modeling, and construction, singly or in combination, all

contribute their special assistance to enlarge and vivify the conceptions brought out in the various subjects of the curriculum. Where the imaginative and personal quality is predominant, as in the story form, painting, drawing, and clay work have their special value; where material facts and conditions of life are dealt with, as in the study of primitive life and the beginnings of history, opportunities are found in the reproduction of typical forms of shelter, implements, and inventions; where the relations of human life to the physical environment are the theme, as in nature study and geography, abundant opportunities for the study of occupation are possible both thru pictorial and constructive representation and the practice of typical operations.

With the young child, the tendency to reproduce the actual or the imaged environment assumes different forms at different stages of growth. Two phases seem to be always present, but in varying degree. With the very young child this instinctive tendency is largely satisfied with mere representation, either pictorial or constructive; but, as the experience enlarges and the powers of perception develop, the interest in and the desire for reality increase, and this can be satisfied only by the achievement of things of practical service and use. Both of these tendencies are present thruout the school period; they are, indeed, but two phases of the same tendency, and the one blends insensibly into the other.

It is true, however, that the representative phase is particularly strong with the pupil of the early grades, and that thru this channel occur many of the most natural opportunities for relating handwork to the activities of the school. Such representation on the part of pupils of the primary grades may sometimes seem too crude and fanciful to have a disciplinary value, but we should remember that such concrete suggestions serve as necessary centers for the play of the childish imagination, and that thru them life finds real expression and fulfillment. It would be, of course, most unnatural to expect great perfection in the natural expressions of seven- and eight-year-old pupils. Truth of expression is the important thing, and great accuracy of result is not truth of expression with the pupil of the early grades.

It is on this side of representation that drawing, painting, and clay-modeling have their natural opportunities. Representation thru these media may be either a record of fact, as the picture of a flower, tree, or animal form, or it may be an expression of an imaginative picture brought up by the reading of story or history. Constructive representation, which approaches nearest to reality, has also an important place here, and constructions ranging from a simple miniature house in paper to elaborate scenes with numerous details illustrating some phase of life or industry, all suggest the varied possibilities in this field. This last type of work, in which the whole or part of a class unites upon a common project, represents an important possibility in this direction. The value

of such work is twofold—on the one hand, it introduces the healthiest and most practical kind of co-operation into the school, and, on the other, it allows of larger and more important undertakings than are possible in individual projects.

In the early grades such work may very often take the form of something like the sand-table work of the kindergarten, but with more realistic details, and setting forth some phase of life touched upon in the other studies. With large classes such work presents some severe problems, and it cannot, perhaps, be carried very far in public-school conditions, but the great vividness of such representations to children and the fine experience involved in their making are certainly worth going far to attain, and it would seem as if a small amount of such work might be attempted under even the most restricted conditions.

In these first years this phase of constructive representation goes far toward satisfying the pupil's instinct for concrete expression, and indeed persists as a natural form of expression for a long time, but from the first, interest in and demand for reality are increasing, and, as the pupil grows older, the things made must approach nearer and nearer to the actual fact. Thus the making of paper furniture for a small house means much to the pupil of the first grade, but is no longer satisfying to the boy of the fourth grade.

Representation thru construction continues to have its place, however, in the upper grades of the school, but its possibilities become more and more limited to things that possess large meaning and imaginative significance, such as the log or block house of the early settlers in connection with the study of colonial history, or a model of a classic temple at the time of the study of Greek history. All thru such work the important point to be scrutinized is whether the particular project is worth while to the young worker. Is it something adequate and satisfying to his desire for concrete expression? Is it a thing that enlists true motive to its fulfillment? As the power of visual imagination increases, concrete expression plays a less and less necessary part, and its value is confined more and more to special interests. Constructive representation remains natural only as long as it serves to express a significant fact more satisfactorily than other media. When this ceases to be the case, other channels of expression become more natural and more worth the attention of the school.

Such work as has been suggested means flexibility. There can be no course or so-called "system" for such work. It means simply the bringing in of another expression element into the work of the school, a giving-out side added to the taking-in side.

But the school interests, as represented by the curriculum of today, are not all. Handwork expression touches all the interests of young life, and the out-of-school interests should find a place in any generous

scheme of such work. The school interests, to an extent, deal with general ideas, but the out-of-school interests mean the personal and the immediate. Where representation may be largely relied on to express the school interests, the directly useful is necessary to meet the other. And, on this side, the demand for reality and practical achievement that exists from the first finds its opportunity and fulfillment.

And here there should be infinite variety. If we are to deal at all with these out-of-school interests, and not delude ourselves as to the question of motive in the work, we must find what are the true interests of the particular children we are dealing with. No single scheme of work can apply to all conditions. There must be some kinds of work for the city and others for the country; some for the school in the tenement districts and some for those in the precincts of the wealthy; some kinds for the towns of the seacoast and others for those of the interior.

We must put by the delusion that any one course of work can reach the real interests and stimulate the energies of all classes of children. With the pupil of the primary school, as, indeed, with the pupil of the grammar school, if we are to appeal to the idea of use and expect to find in this idea a real motive, a real incentive, it must be a real use that we offer, not one pictured simply in the teacher's mind. It must be a use that has a real meaning to the individual worker, and one that builds upon the actual conditions of his life.

Another quality that demands consideration in this work, as a whole, is the need of variety in our materials and processes. If we consider all our work but as the expression of some real interest of the worker, this matter will take care of itself, for we shall soon see, if we study the range of a child's interests, that they cannot be confined within the possibility of any one material or one process, but that they touch the whole field of his surroundings.

Construction in paper and cardboard is extremely practical and valuable, but work in this medium is only of one kind. Accuracy, symmetry, and regularity are its characteristics, but freedom of expression is wanting. Other kinds of work that represent other elements, such as freedom, grace, and flexibility, are just as valuable, and should be a part of the handwork experience. Such elements are found, first of all, in clay-modeling, and then in raffia and basketry, simple weaving, sewing, and in bent-iron work. On the other hand, no one kind of work or material is broad enough in its possibilities to express adequately, even in a meager way, the varied interests of school and out-of-school life, of boy and of girl nature.

All the practicable and typical constructive processes contribute a share, but only when we draw freely upon the different elements and use one thing and another alone or in combination, as is most suitable for

our special purpose, shall we reach the natural use of handwork in the school. It is not here a matter of training in any special process; it is a question of using the resources of handwork in the service of the school.

Reference has thus far been made solely to the relation of handwork to the nature of the child, but there is another side that the school has to consider, viz., its relation to social life. On the side of the pupil, handwork is a medium of expression in terms of form, color, and material; in its relation to social life it is essentially a means of interpreting art and industry. It is the active agent by which the pupil is brought into contact with typical phenomena of these great fields of human activity. The full interpretation of these factors of social life by the school is a task, indeed, that cannot be borne solely by handwork. That, I take it, is to be fully comprehended only thru the gradual readjustment of the curriculum, as a whole, in response to the needs of modern life. The main burden of this task, however, must fall upon actual work with the hands, and this fact should naturally have a bearing upon the selection and organization of material.

In the lower grades, or for that matter in any place in the school, the differentiation of either art or industry cannot be carried very far. Only the fundamental activities that concern the very structure of social life can be studied, and these only in their elements. The essential problem in this direction, I conceive, is to trace the evolution of food, clothing, and shelter from their simplest beginnings to some understanding of their meaning in relation to the civilization of today.

This meaning of handwork is by no means opposed to its use as an expression medium; for it is precisely along these channels of social activity, these large interests of the actual world, that the deep instincts of the child issue, and in which he finds his natural desire for power and capacity. These two relations of handwork are, indeed, but two phases of the same problem. One of them sheds light upon the method of instruction; the other points to the general character of subject-matter.

The problems of practicability and expense are, of course, vastly important ones in regard to this work. All of the above kinds of work entail practical difficulties of one kind or another in the handling of material and in the operation in the regular class-room. And yet the difficulties involved are only material ones—the child stands ready and eager to seize upon these activities and reap incalculable benefit from them when the way is opened. Can we conceive that the way will not be opened and that the practical resourcefulness of the American teacher, when she is convinced of the necessity of these agencies, will not find ways and means to master this problem and bring to bear all these natural resources upon the life of the schoolroom?

The real problem, indeed, at the bottom of this whole question is presented by the grade teacher, for all considerations, economic and

pedagogic, emphasize the necessity that whatever of handwork is done in the primary school must be done by the regular teacher. Even if it were economically possible to consider any other arrangement, it would be pedagogically out of the question. Only the regular teacher can bring the handwork into harmonious relations to the school life and use it as a true medium of expression of the other school work. Herein are at once both the difficulty and the hope of the situation. Difficulty because the grade teacher has commonly had no special training in handwork, and, even when convinced of its value, is apt to regard the whole proposition with diffidence and even dismay. This feeling, I firmly believe, is really a lack of confidence rather than any lack of capacity to deal with the simple processes that are needed. It is because such work has not been a natural element in the experience of teachers, and not because of any inherent difficulty in its requirements. The diffidence at undertaking work of this character will, I feel sure, largely disappear when we do away with our set courses that appear so formidable and seem to need so much of technical training, and take up the work in the spirit of natural use; when we substitute for the idea of teaching handwork the idea of teaching thru handwork. When handwork is taken up in this spirit, it ceases to be a thing apart. It is no longer simply so much more work added to an already crowded curriculum, but a helpmeet and assistance in dealing with the constant problems of the school.

On the other hand, it will be only when the work is approached in this spirit, and the regular teacher comes to use handwork expression in the same way that she now uses speech and writing, that handwork will reach its full possibilities in the primary school, or, for that matter, in any other stage of school work. For the primary school is in a sense the strategic center of the whole manual-training movement. When this work is assimilated in the primary school and there brought into organic relations with the school life, it will not be long before its proper function will be understood by all teachers, and the day will have passed by when manual training is thought of as a little work with tools in a room apart from and divorced from all the other interests of the school.

When this time comes and manual training shall be reaching out to serve all the natural and varied interests of school life, then, and then only, will handwork come into its full educational inheritance, and then, and then only, will it find its full possibilities as one of the most powerful, because one of the most natural, expressions of child life. I believe that this time will come. It will come, of course, but gradually and perhaps slowly; but, as it comes, we shall find ourselves, I believe, coming into a new era for manual training; an era when this work will be brought out from its isolation and made an organic instrument of all school work, understood and respected by all teachers as an essential element in the education of children.

THE SCHOOL AND THE LIBRARY—THE VALUE OF LITERATURE IN EARLY EDUCATION

FREDERICK M. CRUNDEN, LIBRARIAN, PUBLIC LIBRARY, ST. LOUIS, MO.

I have some hesitancy in presenting to a gathering made up of progressive educators a thesis on the value of literature in education and the benefits to be derived from the co-operation of school and library. I feel that I may be regarded by some with the amused compassion that an East Indian or Chinese audience would bestow on a speaker who should come forward with an elaborate argument to prove the value of rice as an article of diet. It was not so, however, twenty-five years ago, when I began to talk on the subject. Most teachers then regarded story-books—any books but text-books—as a distraction—a hindrance to class progress and an interference with school discipline. I fear there are some who still hold the same view; but the number, I am glad to believe, is not large, and is rapidly diminishing. I know how hard pressed teachers are to keep their classes up with the schedule; and if they decline the co-operation of the library, it is because they look upon this as another weight added to their overburdened shoulders. But this is like the mechanic who works away with blunt tools because he hasn't time to sharpen them.

At the present day, to say that the library can be made helpful to the school is to state what seems to us an axiom. But "axiomatic" is, after all, a relative term. What is axiomatic to one person may not be to another of different experience. I remember that it once took me several weeks to impart to a student in geometry a comprehension of and a realizing belief in the axiom, "Two things that are equal to the same thing are equal to each other." Now, my experience as pupil and teacher long ago made the value—the necessity—of literature in early education a self-evident proposition. Long before I read the statement in Sully's *Psychology*, I knew "that the habitual narration of stories, description of places, and so on, is an essential ingredient in the rudimentary stages of education. The child that has been well drilled at home in following stories will, other things being equal, be the better learner at school. The early nurture of the imagination by means of good, wholesome food has much to do with determining the degree of imaginative power, and, through this, of the range of intellectual activity ultimately reached."

In his last novel, *That Fortune*, Charles Dudley Warner criticises an exclusively text-book training in a dialogue between two young men in college. One had come up thru all the regular grades and had entered college from a first-class fitting school; the other, thruout an unsystematic course of instruction, had enjoyed the run of a good library. The variety and extent of the latter's information is a subject of constant admiration to his better-schooled classmate, who closes the particular conversation

referred to by exclaiming in a tone of vexation : "Well, I might have known something too, if I had not been kept at school all my life."

Yes, we have changed, not *all* that, but much of it. For a new agency has, within a very few years, extended its influence all over the land. The agency I refer to is the co-operation of the public school and the public library. I believe that a majority of teachers now realize what forty years ago was understood only by the most advanced—that the free and joyous activity of the child which is called forth by literature lightens the task of the teacher and is of incalculable benefit to the pupil. To such a teacher of forty years ago I owe the honor of standing before this distinguished audience. To such a teacher of more than three hundred years ago Queen Elizabeth owed her scholarship and her love of learning. Roger Ascham agreed with his friend Wotton that "school should be a place of play and pleasure, and not of fear and bondage." I know such schools today. Their pupils do not make any less creditable showing in schedule work because they enjoy their hours in school—because they at times go, by the teacher's invitation, to visit fairy land, and are allowed to wander at will in the flowery fields of literature.

It is early in the evening, and I don't see anybody sleeping ; but I am going to adopt the plan of the preacher who, along about "ninthly," perceived a number of his congregation quietly slumbering in their pews. Choosing a passage from Scripture containing a repetition of the word "fire," he shouted out that word so loudly that all the sleepers awoke, and one or two started for the door. I am going to shock some of you by a strong statement relating to the power of literature to expand the mind and to develop mental muscle. I took it from the lips of a prominent educator—a teacher whom many of you know personally, and probably nearly all know by reputation. Speaking of the relative value of literature and arithmetic, that *bête noir* of the American school (in wrestling with which, you remember, President Eliot says we waste so much time), my friend gave his views in about the following words: He said he would take a boy of fourteen, of average intellect, whose mind had been developed from earliest childhood by reading the best books, but who had never opened an arithmetic or had an hour's set instruction—who, in short, knew nothing of numbers except what he would inevitably pick up—he "would take such a boy and would guarantee to teach him in six weeks all the arithmetic he need ever know, and as much as he would learn in six years of school instruction."

If you think this too strong, remember that the words are not those of a librarian, but of a teacher. If you all admit that it is largely true, it would seem unnecessary to say more. But there is no blinking the fact that there still are teachers who stick to the "three R's," and the schedule with the same unswerving loyalty that the Honorable Bardwell Slote showed for "the old flag and an appropriation." To these, and to others

who are half-persuaded, I direct my argument, hoping that, thru publication, my remarks may reach a larger audience and one more in need of enlightenment than are teachers who show by their attendance at this convention that they are among the progressive forces of education.

As "an ounce of Vinland is better than a pound of cosmography," let me tell, briefly, what has been done in St. Louis in this line of work, premising, first, that we have had a free library only the last seven years, and that we have been greatly hampered by lack of funds, so that our plans were hardly in fair operation till this last season.

We have now two hundred and sixty-nine sets of books for circulation in the schools. Each set consists of thirty copies of a book carefully chosen for a certain grade. It is better to send thirty copies of the same book than thirty different books, for two reasons: first, because it enables the teacher to have class exercises; second, because the interest of each pupil is greatly intensified when all his classmates are reading the same book. It gives them all a common subject of conversation, an edifying topic to supplant the vulgarities of boys and the inanities of girls. And this is one of the incidental benefits of literature in the school, which is of no small importance.

These sets of thirty are sent to schools on request of their respective principals, to be kept two weeks, with privilege of renewal for two weeks more. At first we sent the boxes on a regular round thru the schools, but changed the plan when we found that in some schools the books were never unpacked. The books may be used in any way the teacher prefers—either in school or at home. We began with the youngest children, supplying to the first grade *Caldecott Picture Books*, illustrated *Mother Goose* rhymes, *Little Red Riding Hood*, *Jack and the Bean Stalk*, etc. These were followed by Scudder's *Fables and Folk Stories*, *Hiawatha Primer*, McMurry's *Classic Stories*, and similar books, going gradually upward thru these stages: first, nursery rhyme and picture-book (which could be, and by at least one principal were, used in the kindergarten); second, the fairy tale; third, the myth; fourth, the mediæval legend; and so on to biography, history, and drama, culminating in Shakespeare's plays for the eighth grade, with striking biographical and historical episodes and nature studies and stories inserted all along the line where they were likely to be understood and enjoyed. I wish to emphasize "enjoyed." That should be kept in view as the immediate object of this reading. Let it be ignored, and the ultimate end is made more difficult, if not impossible, of attainment. There was a very natural preference on the part of many of our teachers for "collateral" reading, that is, reading that has a direct bearing on school studies. There was a disproportionate call for such books as Coe's *Modern Europe* and Carpenter's *Asia*. To meet this call fully would, I fear, cut out many books of sheer delight—such books as will inculcate a love of the best reading and lead to the gathering of vastly

greater information than can possibly be obtained during the few years of a grammar-school course. Don't try too often to palm off semi-disguised text-books on the children. Don't frighten your fish with a bare hook. Library books should, as far as possible, be dissociated from lessons and task work. Let them be as informing as may be, but they should stand primarily for pleasure and inspiration. The sets that have found least favor are those on science and that excellent series, the *Heart of Oak* books—the latter presumably because they lack illustrations. The favorites during the past year were *The Prince and the Pauper*; *Hans Brinker*; *Stories from Homer and Virgil*; *Old Greek Stories*; *Old Stories of the East*; *Adventures of a Brownie*; *Little Lame Prince*; *The Lang Fairy Books*; *In Mythland*; *Stories of the Red Children*; *Scudder's Book of Legends*; *Lobo, Rag and Vixen*; and *Swiss Family Robinson*. Ninety per cent. of the work thus far has been done in the lowest grades.

Of our grammar schools thirty-three made constant use of these sets, twenty used them occasionally, and thirty-three made no use of them. Most of these last are outlying schools, to which the library was unable to send the traveling sets, while some reported that they had a sufficient supply in the books furnished by the board of education. Fourteen schools—among those mentioned above as too far distant to be supplied with the traveling boxes—were made depositories, or branch libraries, with as many as fifty volumes to each room. Six night schools, also, were supplied with sets of books. Thru these agencies a total of 119,708 volumes was issued during the school year—nearly double the number of the previous year. If the library can provide the books, I believe the issue will show an equal ratio of increase next year.

"Well," the skeptic may say, "what of it? Suppose the children did read so many story-books? What does it signify?"

I have already quoted Sully as to the value of this reading. Let me give a few extracts from reports made by our teachers. These reports contain answers to three specific questions:

1. What value do you attach to literature and supplementary reading in connection with the school curriculum?
2. What effect has the general reading done by the pupils of your school had on their progress in their studies?
3. Do you find the books supplied by the library an aid to discipline?

A few replies must serve to illustrate the general tenor of all.

I.

1. The cultivation of a taste for good literature should be, it seems to me, one of the chief aims of the school curriculum. The development of a higher morality and a truer culture and refinement—which, after all, is the final aim of education—can best, and perhaps only, be accomplished by the encouragement of a closer and closer acquaintance with our best literature. I attach to well-directed general reading as high a value as to any subject taught in the schools.

2. Its effect upon the progress of the children has been daily more apparent. It has

given information which has been helpful in all of the studies, especially geography and history; and the language of the children has been greatly improved.

3. I consider supplementary reading as good in itself, and, therefore, cannot regard with favor the conscious use of it as a means for maintaining discipline. Nevertheless, like any subject which thoroly interests the children, it leads them into voluntary application, and so assists in cultivating that spirit which, in the end, eliminates the problem of discipline.

II.

1. The literature furnished by the public library has been of incalculable value. It has supplied us with the larger part of our material for oral reading. It has been the basis of most of our oral language work. It has been both the inspiration and the basis for most of our composition work. The books taken into the homes from the school have been helpful to the entire community.

2. Much of our reading has been very helpful to the language work, geography, and history.

3. It is a very great aid in discipline, both directly and indirectly. Indirectly, thru effect upon character. Directly, by giving pupils something they love to do.

III.

1. Of immense value to all our pupils, but especially to the poor child that can attend school but a very few years.

2. Assists their progress in their studies, awakens and deepens their interest in the subject, adds to thought and information, and changes dry studies into the exchange of ideas, the answering of aroused curiosity, and fixes facts more permanently in the memory.

3. The books supplied by the library *are* an aid to discipline. They change the current of pupils' thoughts, and put them in a better and happier state of mind — more conducive to study and improvement.

IV.

1. The literature furnished by the library has put a life into the reading exercise that it didn't have before. It has made reading the principal study in the course.

2. It has been of great advantage to pupils, has made them enjoy the exercises, has increased their fluency, has brought them to know books and to want to find out about others.

3. Yes, an aid to discipline, decidedly. Pupils are interested in the exercise; consequently they are attentive and orderly.

V.

1. Great value.

2. Broadens the pupil and gives him greater interest in his regular work.

3. Anything that awakens a child's interest aids in disciplining him. When the child becomes sufficiently awakened to realize his own interest, the necessity for discipline is largely removed. This supplementary reading has had that effect. I consider it a great aid.

VI.

I consider the literature in the supplementary readers of great value in obtaining fluency, a working command of good language, and cultivation of the imagination, not supplied by any subject in the course of study.

It is very helpful in discipline — lessening, indeed, the need for discipline.

VII.

Here is a brief extract from another letter :

There can be no doubt of the helpfulness of the public library reading sets in the school. It is the universal experience with us that pupils who do most and best supplementary reading succeed best in all of their work. Most of the difficulty experienced by

the children in the study of arithmetic and geography, for instance, is due to their inability to read the subject-matter correctly. This defect is largely removed by the aid of supplementary reading.

VIII.

I prize very highly the supplementary reading in connection with the school curriculum.

The general reading has caused their minds to grow and broaden and deepen, enabling them to comprehend more readily the ideas conveyed by the printed page.

IX.

A principal of many years' experience writes :

One of the greatest blessings conferred on children is providing them with abundance of judiciously selected supplementary reading. The enlargement of the horizon around the child, the increasing of his vocabulary, the encouragement to go to the fountain-head and there drink more deeply at the great source of supply—the public library—all follow in natural order.

I believe discipline grows easier from year to year. The abundant supply of reading matter to be taken up as soon as lessons are learned has contributed largely to this result.

I asked some of my most competent assistants their opinion of the value of books from the library. The reply was : "Look at the faces of the pupils as they are using the books. See how absorbed they are in following the story. The book is new to them. All the charms of novelty gather around the subject."

X.

The head assistant in the Columbia School sums up by saying :

Supplementary reading, especially in the lower grades, is worth all the rest of the school work.

The St. Louis school in which most reading is done is the Columbia. It goes without saying that it is one of the best schools in the city. At my request, the principal, Mr. Charles L. Howard, furnished me with a general statement of his views on the educational value of literature, and the methods by which it is made the chief feature in his school. I should like to quote the whole of his report ; but, not to overrun my time limit, I must content myself with a few extracts :

We make no parade of "literature work" or of supplementary reading. The latter term is a misnomer ; it is misleading ; what others term supplementary reading in my school is *the whole thing*. We have two forms of reading at the Columbia School. First, a form of class work, in which the material for use has come to be selected on a basis of interest, and what appears to be a natural appreciation of the Herbartian theory of the culture epochs. After the second grade or year there is no *teaching* of reading lessons, in the ordinary use of that term. There is no preparation of reading lessons for recitation. Generally each class in a given grade reads the list of books given as available for its grade—sometimes less, oftener more. Sometimes a third- or fourth-grade class reads *Evangeline*, *Miles Standish*, *The Merchant of Venice*, or *Julius Caesar*, with exquisite satisfaction. I have seen a second-year class enthusiastic over the *Pied Piper* and *Horatius at the Bridge*. [Let me interject here that I have seen children not yet in the first grade enjoying these same poems.] Things are read as *wholes*. For no one ever reads Cassius' plea with Brutus, then runs off to find the whole play ; but generally one who reads *The Merchant of Venice* first turns again and again to the court scene. These books have generally the characteristics of the classics ; and so we know that from pure

interest our pupils do a vast amount of valuable reading, from which they get facility in reading, a vast store of useful information, broad views, independent notions, and an acquaintance with the material which, molded in the master-mind, gives beauty, grace, vigor, and endurance to the best literature.

The second form of reading in the school relates to the use of miscellaneous books independent of the school work. In this connection reading is encouraged, but no supervision of it is assumed.

About six hundred pupils in the school have tickets in the public library. They appear to be in constant use.

In 1898-99 we collected reports of "outside readings." In eight months seven hundred pupils reported something over ten thousand books read. They were mostly what I should call for myself "good books." . . . The most pernicious books come into the hands of children thru the suggestion of well-meaning people who are ignorant or thoughtless of their influence—such books as set up false ideals, inflame feeling, discolor fancy, and distort judgment; the kind of books that used to abound in Sunday-school libraries. The real value of this work cannot be told. The influence is mainly realized in conduct and character.

Our friends are sometimes disturbed over the freedom in our work; but it is observed that the freedom allowed naturally secures a basis of interest which tends to make the reading thoughtful; that those who read most widely accomplish most in other forms of school work; that the effect upon conduct is most salutary, showing in no case a bad result from the reading habit; that the ordinary nature-study books do not appeal to children strongly enough to secure voluntary reading as wholes; that the "classics" tend to supplant everything sensational or weak; that natural children make as few errors in selecting for themselves as their elders make in selecting for them; that the "bad" books generally appear but once; that a book is on the whole good or bad as determined by the attitude of the mind toward it.

An interesting experiment in the teaching of literature was tried in the St. Louis High School the past season. A full account of methods and results will be given before the Library Department by Mr. P. M. Buck, who had charge of the work. I will merely say that the public library supplied to the high school about five hundred volumes, in multiple copies, of the best American and English authors of the century, seven hundred cards were issued to the pupils, and more than twelve thousand volumes were drawn by them.

We see, then, that a consensus of the St. Louis teachers who have welcomed the aid of the library is that general reading is "helpful in all the studies;" that it possesses "as high a value as anything taught in the schools," while two teachers consider it "worth all the rest of the school work;" that it is "of immeasurable value to all pupils, but especially to the poor child;" that "pupils who do most and best supplementary reading succeed best in all their work;" that it is "a great aid to discipline directly and thru effect on character;" that "it puts children in a better and happier frame of mind—more conducive to study;" that "its influence is mainly realized in conduct and character;" and finally that "the books taken into the homes have been helpful to the entire community." Could we ask for anything more? Promotes progress in all studies! Aids discipline! Improves conduct and forms character!

And, lastly, reaches out into the homes and educates parents and older brothers and sisters.

And, now, as a climax and summary to this testimony from teachers, I must quote, tho it be for the n th time, these words of President Eliot:

From the total training during childhood there should result in the child a taste for interesting and improving reading, which should direct and inspire its subsequent intellectual life. That schooling which results in this taste for good reading, however unsystematic and eccentric the schooling may have been, has achieved a main end of elementary education; and that schooling which does not result in implanting this permanent taste has failed.

In that thoughtful and stimulating essay, *Culture without College*, Dr. Gannett gives as the three great agencies of education, "the three chief teachers—work, society, and books." This cannot be disputed; but as to the order of the instrumentalities named—while they are to such great extent reciprocal and interactive—I am inclined to think that, for the great mass of children, books, if brought into their lives early enough and constantly enough, may easily be made the controlling influence; for the standards and ideals obtained from good books will largely determine both companionship and kind and quality of work. Ignoring the other two factors creates, as Dr. Gannett says, a dwarf; and if the bookish education is "mere text-book education," the result is a "dwarf of a dwarf." The influences of our active life tend to reduce to a very small number the first tribe of pygmies; and the recent development of co-operation between school and library promises, in a short time, the extinction of the latter minified manikin.

To determine the value of the library, or of any other educational agency or adjunct, we must agree upon *what is education*—we must decide what it is we seek to do for the child in giving him "an education." Do we—*can* we—send out *educated* boys and girls from the grammar school at fourteen, or from the high school at eighteen? Can we do more for them than teach them how to read and make reading interesting to them? It is for these, the 99 $\frac{1}{2}$ per cent., I speak. As to the $\frac{1}{2}$ per cent. of college graduates, if they have been started right, they need give us no concern.

What, then, is the purpose of education? One purpose is to enable the boy to make a living. Yes, but very little suffices for that. I have known men scarcely able to read who had much larger incomes than any of us. To make good citizens. Unquestionably that is what most concerns society. It includes, of course, ability to make a living and much more. But how is the ordinary school curriculum to fit the child for the duties of citizenship? How is he to grow morally strong on an exclusive diet of text-books? How can a knowledge of the capes and rivers of Asia, of the tables of Troy and apothecaries' weight, and of other useless and unentertaining facts give the child any idea of his rights and duties as a social being? What nurture for the imagination—which is

so necessary a first step in mental awakening—what nurture for the imagination does the child get from hours spent in finding the greatest common divisor and least common multiple? I speak feelingly of this particular grind, for I recall many tedious hours wasted on it. My little boy of five and a half got more mental development from having Stanley Waterloo's *Story of Ab* read to him three or four times than I did at twice his age out of many weeks of tiresome work over the greatest common divisor and the least common multiple. And to this must be added the intense enjoyment the story afforded—and, above all, the desire for more knowledge which it awakened.

It is not necessary to discuss the question whether pleasure is the chief end of life, but we must agree that a life which has known no pleasure is a blighted nubbins, a stunted tree, a sorry spectacle. In every human soul there is an insistent demand for pleasure in some form. This cry is most clamorous in childhood. With the child, indeed, pleasure is the mainspring of action, the central object of desire. Shall we check or ignore this longing for the joy of life when it takes the form of a thirst for knowledge, of a craving for high companionship, of the fresh soul's aspirations toward the ideal? And is there any greater pleasure to the child who has been early led to a liking for literature than to lose himself in the pages of a fascinating book? I have known more than one healthy, active-bodied boy who had not yet learned to read, who would gladly leave a game to listen to a reading from such a book as *Hiawatha*, *Tanglewood Tales*, or *Stories from the Fairy Queen*. Pleasure is essential to the young life. Without enjoyment it cannot blossom, but is blighted and withered like a plant without water. If, then, we take no account of the culture and inspiration of literature, if we regard it merely as a means of pleasure, we cannot deny it to the child. We owe it to the nation, which intrusts us, as educational experts, with the development of its children; we owe it to our high office to see that this elevating pleasure early enters into the lives of the young people committed to our care. If for no other reason than the substitution of higher for lower, of intellectual for physical enjoyment, it is our duty to inculcate in our young charges "this habit of reading," which, as Anthony Trollope says, "is a pass to the greatest, the purest, the most perfect pleasure that God has prepared for his creatures."

We can recall incidents of our childhood which illustrate the various sources from which pleasure came to us; and we find the emotional life of a child charmingly pictured in Pierre Loti's *Romance of a Child*. This little book shows how objects and events, striking from their brightness, their somberness, their horror, or even their mere suggestiveness, make instant and indelible impressions on the super-sensitized plates of the young mind. Now, every boy and girl cannot be brought up in a country house with a pretty garden containing old fruit trees and a fountain, with

views of magnificent sunsets across field and marsh and sands to a stretch of the illimitable ocean. Not every boy has a forest to roam thru in summer, or an island with its novel life to enjoy. Not every embryo man, like the hero of Edith Lanigan's charming sketch in the January *Atlantic*, finds in his father's library the means of aerial trips to all countries and ages, personally conducted by the most affable and entertaining guides. But every boy and girl can, and should, be supplied by school and library with voyages to all lands, with cinematographic views of man's upward progress, with mental pictures of forests, seas, and islands—famous islands such as Treasure Island and Crusoe's island; vast forests inhabited by pygmies and gorillas; seas of Sinbad and the Maelstrom and the Ancient Mariner. Above all, every child should be furnished with winged cap and shoes that will bear him to the realm of fancy and fairy land. Every child should be introduced, not only to Alexander and Hannibal and Cæsar, to Franklin and Washington and Lincoln, but also—and earlier—to those even more interesting, those fascinating personages, Little Jack Horner, the Three Bears, and Cinderella; Quick-silver, Perseus, and Ulysses; King Arthur, Sir Lancelot, and the Red Cross Knight; Christian and Robin Hood and Mowgli. All this the school and the library, working together, can do for the children of the nation. Especially to children of narrow home horizon, of sordid, and perhaps vicious, surroundings, are we called upon to give glimpses of the great world into which they have been born, some conception of the heritage which they may claim, and of its cost to countless generations in blood and tears, in sorrow and suffering. We can fill the white tablets of their minds with beautiful pictures which will cheer them thru life; we can impart to them an ambition and a determination to make the most of their powers; we can implant in their souls ideals which will lead them away from sordid desires and base pursuits, and make them better citizens of the republic. Is not this the purpose of education?

When I say "we," I mean teacher and librarian. The librarian alone cannot do it. And, let me add, the teacher can never reach this goal with the text-book for his only staff. A farmer might as well hope to raise fine horses and oxen on an exclusive diet of dry oat straw or corn shucks.

Achievement and character are based on the ideal. Whence is the child to gain high ideals? For the average child there is but one source—the lives and utterances of the idealists of the world—the dreamers, the prophets of all ages. They will teach him what education is, what character is, and how precious it is above all things. They will teach him that the total of philosophy is not summed up in Iago's "Put money in thy purse;" that he may gain wealth and be impoverished in soul; they will show him that he may master science, but that "the measuring rod of science can never measure the ends of living;" they will make

clear to him that "though he speak with the tongues of men and of angels, and have not love, he is as sounding brass or a tinkling cymbal." As a citizen, too, he will realize that it is not prosperity, "it is not piety but righteousness that exalteth a nation." While possessed of the spirit of righteousness, he will not be devoid of piety. He will have the all-pervading piety that Dr. Harris speaks of—"the piety not merely of the heart, but the piety of the intellect that beholds the truth, the piety of the will that does good deeds wisely, the piety of the senses that sees the beautiful and realizes it in works of art."

My friends, as I said in the beginning that it seemed a work of super-erogation to urge co-operation of school and library before this body of alert and advanced educators, so, in conclusion, I must offer the overpowering importance of the subject as my excuse for giving final emphasis to a thought which I hope is never wholly absent from our minds and is the guiding influence of our lives—the supreme importance of the work intrusted to us. As Wendell Phillips said: "*Education is the only interest worthy the deep, controlling anxiety of the thoughtful man.*"

In Louise Jordan Miln's *Little Folk of Many Lands* I find this striking presentation of the thought I wish to leave with you in closing. As she and her father were seated on the Italian seashore one day, "he pointed to the half-clad children playing near. 'There is nothing in all the world so important as children,' he said, 'nothing so interesting. If you ever wish to go in for some philanthropy, if you ever wish to be of any real use in the world, do something for children. If you ever yearn to be truly wise, study children. We can dress the sore, bandage the wounded, imprison the criminal, heal the sick, and bury the dead; but there is always a chance that we can *save* a child. If the great army of philanthropists ever exterminate sin and pestilence, ever work our race's salvation, it will be because a little child has led them."

SOME OF OUR MISTAKES

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This is a safe subject to take when addressing an educational association anywhere, whose object must be mutual criticism rather than mutual admiration. Is not the object of all true educators to stimulate thought and correct mistakes, that we may profit by the shortcomings of the past and make present life more complete? It may, indeed, be said that I know too little of the United States to speak with any authority concerning their mistakes. That is perfectly true, and you must, therefore, consider that my speech refers mainly to Canada, tho, as all here are fellow-workers and the conditions of the two countries are in the main alike, I

may be permitted to take the position of confessing common sins, instead of acting as the "ill bird which fouls its own nest." You are the older, wealthier, and more populous country, and it may even be, thru our giving you that sincerest form of flattery known as imitation, that you are responsible for our mistakes, as well as for your own, in educational as in commercial matters. As regards the latter, by affinity to Great Britain and tradition, as well as by reason, we are free-traders; but you are steadily influencing us into becoming protectionists; and tho our wall against your products and manufactures is not yet anything like so bad as your wall against us, it is clear to me that ours will get worse if yours does not get better. We sympathize, you see, with the brotherliness of the moderate drinker who, going home with unsteady gait, saw a more thoroggoing toper lying in the ditch: "I cannot help you up, my dear fellow, but I can lie down beside you."

Our first great mistake is that we have systematically undervalued the teaching profession. If mind is greater than the body, if ideas are more important than dollars, and character of more consequence than anything else, then only the best and the best-trained men and women should be allowed to teach, and these should be honored above every other class in the community. How dreadfully we have failed here! Public-school teachers are often no better taught and no better paid than clerks or mill-girls; some high-school teachers have not even our easily attained college degree, and not a few university professors would not be allowed a post in a German gymnasium. We think that anyone can teach our children, and, therefore, those who offer to teach for the smallest salaries are preferred by boards of trustees.

As the history of the world is the judgment of the world, let us ask what its judgment is regarding the importance of teachers. According to its verdict, they have been the great benefactors of the world both in the East and in the West. To this day, the educated youth of Britain, of the United States, and of Europe sit at the feet of those two great teachers, Plato and Aristotle, when studying for the highest degree in *literae humaniores*. Plato and Aristotle again were the disciples of that genuine teacher, Socrates, who taught the youth of Athens so effectually that they gave him hemlock to drink, a reward such as was usually given to the prophets of Israel. What a tribute to the intellectual supremacy of Socrates have the centuries steadily paid, because he insisted on getting to a rational foundation for life and tested every other foundation with quiet, remorseless dialectic! His spirit, thru his disciples, has ruled all the western world from his urn for more than 2,000 years. The phrase which the Greeks used with regard also to their great dramatists was that Æschylus taught this, that Sophocles taught this, that Euripides taught this. In other words, each play was a lesson, and the poet was a teacher. Go to the East, and the record is the same. Buddhism is the most widely

spread religion there. The Buddha was simply a teacher, one who taught his disciples the secret of life and character, making the deepest truths familiar to all by means of parables, like Him of whom it was said that without a parable he taught nothing. Who, again, is the man that the teeming millions of China have revered for twenty-five centuries, to whom they raise temples, and who has molded their compact civilization? Confucius, who from first to last was a teacher, who, while secretary of state or prime minister, based his successful administration on what he had taught his disciples, and who retired from his high office to resume the work of teaching, when his aim was deemed too high by a sovereign who had yielded to sensual temptations. Going higher still, by what title was Jesus known, during all his public life? By the title of rabbi, or teacher. He taught the inner circle of his disciples and the multitudes, "without hasting, without resting."

What was the great characteristic of all these teachers? They taught with authority. Every one of them knew his subject, took it seriously, loved it for its own sake, continually found new wealth in it, was enthusiastic about it, and so made his disciples enthusiastic. To come in contact with such a mind is of itself a liberal education. That is what Garfield meant when he defined a college as President Hopkins sitting on one end of a log and he on the other end. Such a teacher makes his subject interesting to his scholars, unless they are hopelessly bad or hopelessly imbecile. Because we seldom get such teachers, we demand subjects of study which in themselves are interesting, such as dime novels, shilling shockers, penny dreadfuls, Henty's histories, and the sporting columns of yellow journals. Fond parents, seeing the dear children devouring literature of this kind, are filled with admiration at their devotion to books and love of learning, and sigh over the educational advantages which this generation has, compared with the condition of things in their days. The scholars should, of course, be interested. But there is a great difference between interesting by inspiring and by amusing or exciting. We seldom attempt more than the latter. We have substituted for discipline merely interest.

Here I touch on the second great error we have made. Thru not caring to get the best teachers and not valuing the best, we are continually on the hunt for a royal road to knowledge. There is no royal road. To become educated, a man must work, and work is what the natural man hates. Unless we overcome that bad, deep-seated instinct, we do not educate. Nothing is so destructive to manhood or womanhood as laziness. There has been much talk in our day of the dangers of strong drink, and of the thousands ruined by drunkenness. It would be more to the purpose to talk of the danger of idleness, and of the tens of thousands it ruins. Everyone can see that drunkenness is a sin, but few see the sin of mental inertia. A good school is one that has a good

teacher; and the good teacher, when he is allowed a free hand, does not let children pick and choose what they themselves find interesting, but makes them learn accurately what has been thought out as the best course for mental discipline and character-building. As Professor Münsterberg, in an article on "School Reform" in the *Atlantic Monthly* for May, 1900, puts it :

He who is allowed always to follow the paths of least resistance never develops the power to overcome resistance; he remains utterly unprepared for life. To do what we like to do, that needs no pedagogical encouragement; water always runs down hill. Our whole public and social life shows the working of this impulse, and our institutions outbid one another in catering to the taste of the public. The school alone has the power to develop the opposite tendency, to encourage and train the belief in duties and obligations, to inspire devotion to better things than those to which we are drawn by our lower instincts. Yes, water runs down hill all the time; and yet all the earth were sterile and dead if water could not ascend again to the clouds and supply rain to the field which brings us the harvest. We see only the streams going down to the ocean; we do not see how the ocean sends up the waters to bless our fields. Just so do we see in the streams of life the human emotions following the impulses down to selfishness and pleasure and enjoyment, but we do not see how the human emotions ascend again to the ideals—ascend in feelings of duty and enthusiasm; and yet without this upward movement our fields were dry, our harvest lost. That invisible work is the sacred mission of the school; it is the school that must raise man's mind from his likings to his belief in duties, from his instincts to his ideals, that art and science, national honor and morality, friendship and religion may spring from the ground and blossom.

Our third great error is that we have imagined that there is a royal road to the making of good teachers. There is not. Good teachers cannot be extemporized or made in a hurry. They cannot be made by the mere teaching of psychology, pedagogy, or methods. Something infinitely more important is needed. Content is always more important than form. What is the good of your method, if you have nothing to teach? A good teacher must know thoroly what he has to teach. If it is English, he should know English literature, and to know that he must be a classical scholar, must know and love the great masters, and have made at least one epoch or department his own, so that he might write intelligently regarding its relations to the whole. So with every other subject that he may be called on to teach. Here again Münsterberg has some words of wisdom for us :

I had no teacher who hastily learned one day what he must teach me the next; who was satisfied with second-hand knowledge, which is quite pretty for entertainment and orientation, but which is so intolerable and inane when we come to distribute it and to give it to others. I had from my ninth year [the age at which German boys usually enter the gymnasium] no teacher in any subject who had not completed three years' work in the graduate school. Even the first elements of Greek and mathematics, of history and geography, were given to us by men who had reached the level of the doctorate, and who had the perspective of their own fields. . . . A great poet once said that any man who has ever really loved in his youth can never become quite unhappy in life. A man who has ever really taken a scholarly view of his science can never find in that science anything which is quite uninteresting. Such enthusiasm is contagious. We boys felt

that our teachers believed with the fullness of their hearts in the inner value of the subjects, and every new bit of knowledge was thus for us a new revelation. We did not ask whether it would bake bread for us. We were eager for it, on account of its own inner richness and value.

"We did not ask whether it would bake bread for us"! How impractical! How unlike the British author, who, writing recently on what he calls "the curse of education," says: "The children of agricultural laborers and small farmers are given instruction which will be of no earthly use to them in the occupation for which they are naturally fitted." Of course, they should from infancy be taught only how to dig and scrub. Why should they be sent to school at all? "French and mathematics," he says, "are equally valueless accomplishments for the carting of manure." The *London Spectator* very naturally asks: "Does he want them taught to cart manure?" In Canada as in the States, we get our best students from the farms. This so-called "practical" mode of teaching existed in full perfection at Dotheboys Hall. Mr. Squeers expounded it to his assistant, Mr. Nickleby:

"First boy—c-l-e-a-n, clean; w-i-n-d-e-r, winder; go and clean the winder. Where's the second boy?" "Please, sir, he's weeding the garden." "To be sure, so he is. That's our system, Nickleby. B-o-t, bot; t-i-n, tin; n-e-y, ney; bottinney. When he knows that out of a book, he goes into the garden. Third boy—what's a horse?" "A beast, sir." "So it is. Now, as you're perfect in that, go and look after my horse, and rub him down well, or I'll rub you down."

This educational system of Mr. Squeers is systematized now in some places and dignified by the name of manual or technical training. In my day we got what is good in it from our jack-knives and fishing rods, in the playground or the garden or the woods, and the school hours were taken up with serious work; but I suppose "new occasions teach new duties." In Germany a man must have passed the exit examination of the gymnasium, equal to our B.A. or M.A., and then studied three or four years in the university before he can teach in a German gymnasium; but we do not need to engage university men to instruct children in the use of tools or in the mysteries of the kitchen. I myself doubt whether the school is the place for such departments. There is still room in our social system for the house and the workshop. Technical schools of the best kind we do need, but their work should be based on a sound general education, given in the common and high school and—for those who are to be leaders in modern industries and professions—in the university.

As to the education a teacher requires, nothing can take the place of a university training, where the student is taught to think, but it is folly for him to go there until he has been drilled into accurate scholarship at a good secondary school, like the English public school or the German gymnasium. The modern craze for psychology, as the one thing needful for teachers, has its origin in our consciousness that something has been

lacking and in our faith in short-cuts. For the mass of teachers psychology is a snare ; not a help, but a hindrance ; as much so as Saul's armor would have been to the shepherd lad in his fight with Goliath. I believe in studying psychology, but not for the purpose of teaching ; for psychology deals with abstractions, whereas the teacher has to deal with very concrete human beings, who require in their teacher full knowledge, honesty of purpose, and warm, personal interest in his pupils. I once heard a normal-school teacher expatiating to his students on the advantages of psychology in explaining the beauty of a rose ! Another showed that if they only knew psychology they would never stand between their class and the blackboard when they were writing on it the exercise that had to be copied. On both occasions it was evident that Mesopotamia was a sweet word. Such a work as that of Dr. W. T. Harris on *Psychologic Foundations of Education* is not for our ordinary teachers. It is as completely beyond them as Kant's *Critique* or Hegel's *Philosophy of Right* — excellent of its kind, but demanding the trained faculties of the reflective honor graduate.

Our first mistake, then, is that we have undervalued the teaching profession ; our second, that there is a royal road for children to become educated ; and our third, that there is a royal road for men or women to become competent teachers. How shall we avoid these mistakes ? The mistakes are radical and rooted in low ideals of life. Until these are replaced in popular estimation by higher ideals, we must stumble along as we have been stumbling in the past. But, depend upon it, we suffer for our mistakes.

What would you have us do ? Honor the teaching profession by giving inducements to the ablest men to enter and remain in it. That is done in the old country. There is a career there for teachers. The heads of the great public schools, for instance, receive far higher salaries than the heads of universities on this continent. The archbishop of Canterbury, in rank, comes next to princes of blood ; and of the last four archbishops three were headmasters. Heads of colleges and universities have a recognized high social position. Professors who have a taste for public life are elected to the House of Commons. Others receive peerages. An improvement has taken place as regards salaries in the United States within the last decade or two, but there is room for improvement all along the line. At present the teaching profession is commonly regarded merely as a stepping-stone to other professions or occupations, which of course is an infallible sign that in public esteem it is the lowest of all professions.

Again, honor the teaching profession by your attitude to it in the home. Nothing in Germany and in Scotland struck me more than the contrast between their home attitude and ours. Education was taken seriously. The hours for lunch, dinner, and social engagements were

arranged to suit the school hours. Teachers were spoken of with respect, and their decisions accepted without question. No one assumed that lessons could be learned without study, or that difficult subjects should be set aside at the whim of youngsters. Intellectual levity is as much the prevailing note with us as intellectual seriousness is with them.

Finally, in the long run, the teachers' attitude to learning will determine the attitude of the people. If they regard it as a means to material ends, it will be so regarded universally. If they consider that their education is finished, no wonder if education is classed with finite and external things. But if they believe that they have not attained, and are pressing on to far-distant horizons, the point of view of the public will gradually change with regard both to them and their profession.

SOCIAL SCIENCE AND THE CURRICULUM

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Rousseau looked back longingly to the days when prehistoric men lived in primal virtue a happy and blameless life. In somewhat the same way, when we confront the complex and baffling problems of today, we think enviously of the simple existence of our primitive ancestors. They held neither convention nor institute. They were innocent of round tables. They solved the puzzles of life one by one as best they could, but they reflected little on their aims and methods. The education which they gave their children fitted them for the life of the group. The simple sum of social knowledge was easily communicated. The primitive dexterities, handicrafts, and social virtues were passed on chiefly by contact of children with parents. Where each man knew all there was to know, and could do all that anyone did, education was relatively simple. But as knowledge and dexterity increased, they came to overburden single minds; division of labor, intellectual as well as manual, began. Primitive philosophy became the province of the "medicine men," whose successors are the philosophers, theologians, scientists, preachers, and teachers of today.

With the centuries the growing mass of human knowledge has been more and more minutely subdivided; man's world has been resolved into its elements. But along with this analysis has always gone the effort to patch the pieces together, to keep man's experience whole. This great antithesis appears in our current educational theory and practice. On the one hand, we find the constant pressure of new subjects which clamor for admission to the curriculum; on the other hand, we hear the cry for correlation, co-ordination, concentration. It is urged that the life of the child must not be broken up into unrelated fragments; that all these artificially divided studies must be related and kept in unity in the child's growing mind.

Still another tendency asserts itself. We hear much in these days of "the social aspects of education," of "the sociological basis of education," of "the school as a community," and of "school and society." If one may risk the interpretation of vague movements of thought such as these, I venture to assert that this social tendency of education is only another aspect of the inevitable process by which men struggle to see things whole. The conception of the origin and development of the nature and end of society sweeps into unity all the fragmentary knowledge of mankind. The socializing of education, then, is an effort to give pupils, little by little, a way of looking at society which shall enable them gradually to see things in their relations, to order conduct, and to contribute something to the stability and enrichment of the life they live in common with their fellows.

Those who cultivate history, economics, politics, anthropology, and sociology, and who believe that social science in a large sense has an all-important rôle to play in education, are naturally concerned to know what relation these studies may sustain to the elementary and secondary schools. They know that these subjects are at present almost wholly university pursuits, but they remember that certain of the studies which in recent years have crept into the high school and the grades have made their way downward from the institutions of higher learning. The study of science affords a conspicuous illustration. Geology and botany, zoölogy and physiology, gradually lose their identity as they are traced thru the high school down into the grades, where they merge into the undifferentiated protoplasm called "nature study." This process may well serve as a model to those who are anxious to see the social sciences influence the earlier years of the school. And yet I fancy that none of these social scientists, with all their desire to gain admission to the grades, wish to increase the number of subjects now included in that interesting mosaic known as the common-school curriculum. They simply ask for a larger interpretation of the subjects which are now taught, or, perhaps better, the use of these subjects, enriched in some degree, as vehicles of social knowledge and ideals.

Education is essentially a socializing process. Every group educates its members by many devices. This education is always going on. The school is only one agency of this process, and it must adjust its aims and methods to the great social forces which are molding the young in a multiplicity of ways. A study of the social sciences suggests to those who control the schools the principles which must be followed, as well as the materials of instruction and inspiration by which the development of the young into socialized citizens may be furthered.

Social science has already a place in the curriculum. Almost every subject now taught has its social aspects, and these are in many cases emphasized. But not until the teacher looks at these subjects from the

point of view of social science can the curriculum yield its richest results in knowledge and character. The plea I have to make, then, is not a plea for anthropology in the second or third grades, nor a demand for sociology in the high school, but an urgent appeal for the unifying of the curriculum by a social philosophy concealed in the lower stages from the pupils, but clearly present in the mind of the teacher.

Let us trace for a moment the inevitable process by which knowledge grows with advancing years in the mind of the child. In the first stage we have the isolated bits of knowledge, related here and there, and now and then to the shifting interests of the young mind; the story complete in itself, the fact or explanation which solves the problem of the moment. The eager growing mind stores itself with these fragmentary, fascinating things. Then follows the stage in which small groups of these interesting images are brought into relationship. The exhilaration which comes with this putting of things together is known to every teacher. Gradually the process grows wider and more definite. The smaller groups of fact are merged in ever larger and more significant unities, until finally, with the upper grades and the high school, the period of systematic reflection dawns. The early experiences of childhood are re-read and re-interpreted in the light of the larger knowledge. Generalization in its legitimate form is made possible by the preparation of the earlier years. It is thus that nature study in the kindergarten and in the lower grades is gradually organized into the "ologies" of high school and college. In similar fashion the social scientist demands for children the concrete knowledge and experiences out of which, in due time, logical sciences and practical wisdom may develop.

In providing appropriate materials, two aims must be kept constantly in mind: the genuine interests of the child at different stages of his growth, and the maturer view of life toward which this growth is to be guided. The child's interests are at first supreme, but even if this be granted, there are choices of appropriate facts and occupations, and these choices must be determined by the ultimate end in view.

The socializing movement is well under way. In kindergarten and elementary school social materials have long been recognized. The simple industrial processes of weaving, clay-modeling, wood-working, and food preparation have been utilized, but in rather too conventionalized a way. We note in Professor John Dewey's theory and practice the beginnings of a movement back to nature, or rather back to primitive manufacture. Children weave baskets rather than paper mats. They mold pottery rather than balls and cubes. They make looms and wagons and houses rather than conventional elements of carpentry. They cook food for actual use instead of making premature experiments in physics and chemistry. Thus manual training may be socialized in the sense that it may be brought closer to social life and its actual activities,

past and present. In later stages it becomes inevitably and properly more conventionalized, specialized, and precise.

About these industrial processes naturally gather ideas as to the utilizing of raw materials, the working of them into finished products, the comparison of crude, primitive processes with the highly organized production of today. It is impossible to deal with these topics without grouping about them many facts of social and industrial history; thus the idea of change in human affairs, the ideas of organized industry and of commerce gradually emerge from these activities and interests of the early grades.

It may be remarked in passing that the committee may well question the value of economics in the high school, so long as the lower grades are not supplying the elementary ideas which economic science generalizes and arranges in logical form. But in the investigation of industry and commerce, great facts of diversified natural conditions, of mineral resources, of agricultural products, of varying climates, of transportation by land and sea, are inevitably involved.

Geography is being vitalized by this contact with human life and institutions. It is no longer an isolated and dull pursuit. It becomes a study of man's home, the scene of his conquests. The influence of natural conditions on the industry and life of man becomes a fascinating topic. The determining effect of mountain and plain, of river and pass, on the course of history, emerges from one concrete illustration after another. On the other hand, geography is only another aspect of nature study. The lives of plant and insect, bird and beast, take on new meaning when their stories are told in relation to their environment and to mankind. The work of Colonel Francis W. Parker and his staff has demonstrated the value of socialized geography in relating all the subjects of the program.

The formal pursuits of the curriculum, so called, lend themselves readily to the social point of view. The reading-book will undoubtedly become more and more the vehicle of appropriate descriptions and anecdotes which bear upon social life. Much of the old literature will remain, but some of it is already being replaced by stories of primitive life, of typical industrial processes, and tales and songs not only of past heroism, but of duty bravely done today.

It is needless to indicate the ways in which number work is now related to manual training, history, geography, nature study, and other subjects of the school program.

But to the study within the school must be added the visiting of industries and other institutions. As a matter of course, the teacher of nature study sends her pupils afield for material or accompanies them on expeditions into wood and meadow. A few wise teachers are in the same way making the mill, the railway shop, the factory, the power-

house, the post-office, the press-room, the fire station, definite means of instruction for their pupils. There is no more common blunder than to suppose that the everyday life of the community is understood or interpreted by its citizens. The increasing use of stereopticon and slides will not only enrich the study of history, geography, and science, but will add vastly to the means of instruction in industrial and institutional life. Sets of slides will trace the progress of iron ore and coal into steel, of cotton plant and wool into cloth, and will show the men and machinery at work in mine and mill, in field and factory. The lantern will display rural life to city children, and in turn carry these urban pupils into the country. The interests of growing children may be easily guided in such a way that they will appropriate a great mass of material concerning the institutional life of their social group. This will be of value at the time. It will serve as a means of genuine education, and later on will give deeper insight into the nature of social forces.

As pupils advance thru the upper grades into the secondary school, history and literature, in conjunction with geography and science, furnish the best instruments of social instruction. History enriched by some knowledge of primitive life, some conception of economic organization and its influence on men, will become more than the records of battles and dynasties. The idea of social change, of cause and effect in history, may be more and more consciously introduced and discussed. The past must be to a large extent interpreted in terms of the present. The characters and deeds of Greeks and Romans, of Teutons and Franks, can be understood only by those who have some insight into the universal motives of mankind. The attempt to imagine the past will be futile or feeble on the part of those whose activities and interests in the present have been narrowed and formalized. The child who has made a basket or woven a tiny blanket can reproduce more vividly the life of the American frontier than one who has known nothing of such tasks.

The annals of the pupil's own family as an aid to the study of history have been almost wholly overlooked. The earliest ideas of change and continuity in human affairs the child gains at the knee of father or mother. "Tell me a story about when you were a little boy," is the familiar formula. The story of life when parents were young is full of fascination for the child. The still remoter chronicles of grandfather and grandmother fill him with wonder over the lapse of time; while his small imagination fairly breaks down as it tries to conceive the life of great-grandparents and other dimly distant ancestors. The study of family histories and reports upon them in the school may be made points of departure in the lower grades for numberless excursions in geography, in the history of the westward migration of population in the United States, in the means of transportation, and in the housing and the industries of the frontier. Where the pupils' families are quickly traced

back over sea, the longer journeys and the wider relationships are full of suggestions. One refrains from details which have no place in what must be a brief survey of so wide a field. Enough has perhaps been indicated to emphasize the principles involved.

Literature as a means of social instruction has inexhaustible possibilities. The conception of literature as a product, an expression, of social life can be developed. Language itself thought of as a social growth takes on new meaning. The interpretation of a piece of great literature, the reading into it of men's motives, the asking, "Is it true to life?" start fruitful inquiry and illuminating discussion. A careful reading with a class of one of Emerson's essays is a lesson in psychology, in ethics, in history, in language, in literature all at once—and, what is noteworthy, the pupils never suspect that these profound names are lurking beneath the delightful exercise.

The value of the problem in instruction has been fairly recognized in mathematics, physics, and chemistry, but in less exact subjects it has been too much neglected. After all, the real test, if not the best means, of "correlation" is problem-solving—the bringing to bear of all the necessary elements of knowledge upon a given concrete situation. The possibilities of problem-setting are being studied. It is not utopian to set social problems, to describe situations, and to invite solutions. The teacher with a sand box and a few toy houses may set the problem of building a village which shall have houses, schools, churches, factories, stores, etc., appropriate for a specified population in an environment and with transportation facilities indicated at the outset. The discussions and criticisms involved in such a task could not fail to be fruitful. This is only a suggestion of the devices available for stimulating reflection upon the various aspects of social life.

So far stress has been laid upon instruction, upon gaining insight into the nature of social organization; but education is more than instruction. Unless the pupil from all his study of industry and nature, of geography and commerce, of history and literature, gathers appropriate sentiments, selects worthy types of personality and conduct, comes to respond with bounding pulses to the best ideals of personal development, of social service, of loyalty to country, of devotion to righteousness, the whole effort has been futile. Knowledge which is not transmuted into character is abortive.

Yet the problem of moral education is baffling. The dogmatic teaching of virtue is all but hopeless. Ideals are assimilated from the community in so subtle a way that it seems almost impossible to control the individual's development. The teaching of formal ethics comes at a later stage of reflection, and it is a question whether moral philosophy in college has much effect upon character.

The real task is to influence those instinctive, unreflective approvals

and disapprovals with which the individual looks upon men and conduct. There are virtues which our times demand, which it is hard to cultivate. A high ideal of commercial honor, a passion for truth and tolerance, an admiration for political integrity, a deep sense of civic duty, are not unhampered growths in a society like ours.

The idea of self-government in our schools arouses interest. The autocracy of the schoolroom seems an ill preparation for life in a democracy. The experiment of self-control is worth trying, and there is reason to hope for valuable results, but we are not surprised to learn that the ethical standard of the outside community often dominates the school. The "ring" or "machine," favoritism, gross partisanship, wire-pulling, log-rolling often find their way into the student government. To arouse feeling among the pupils against forms of conduct which are tolerated, or secretly, if not openly, admired in the outside world, is a difficult and delicate task.

But little by little thru the years, if the right materials are gathered, if sound and sane suggestions come from personalities which inspire respect and affection, these higher impulses may be strengthened into stable virtues. History and literature and life must be searched for noble personalities and high types of conduct, and these must be held up for admiration and emulation wisely, persistently, untiringly. In the earlier years, discussion and analysis have little place. The emotions come without conscious reflection. Later, comparison and debate, if they do not degenerate into arid dialectic, serve a useful purpose. But the emphasis in the socializing of education should rest upon the early stages where character is laid down in emotional valuations of man and morality.

It is in this field of moral education that I would emphasize the plea, which Professor Patten made some years ago, for contemporary heroes. Let pupils search the press and the community for high types of conduct. The fireman, the railway engineer, the life-saver, the miner, the factory hand, the reformer, the philanthropist of today aid the formation of ideals no less than mediæval crusaders or the heroes of Greece and Rome. There are virtues universal, virtues of purity and courage, of loyalty and self-sacrifice, admirable in all lands and in all ages; but these virtues are interpreted by every people and every epoch. The virtues of the past must be translated into those of the present. As abstract virtues they are lifeless things; they must be incarnated in personalities before they can have power over the young. Here literature and life lend their aid.

The great problem of American education, then, is the problem of making better citizens. Even to state this is to perpetrate a platitude, to obtrude the obvious. But the solution of the problem lies in bringing the school into closer relation with life. The studies which have been too

far abstracted from human experience must be brought back again into contact with the concrete social experience from which they sprang. The highest ideals of co-operation, loyalty, sacrifice, which men have wrought out in the past and present must live again in the personalities of the young. Only mature life can see the full development of character, but the socialized school, under the guidance of a high-minded teacher who sees life whole, may render unvaluable service.

ECONOMICS IN THE PUBLIC SCHOOLS

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Human progress is measured by the degree in which experience is converted into helpful knowledge. It is the function of science to reduce this knowledge to working principles, and of education to present these principles in teachable form. It is by this process that modern institutions come into existence. There is no important feature of civilization, in religion, ethics, art, science, economics, or politics, that has been or could have been accomplished by any one generation. It is all the result of successful contributions of succeeding generations, thru converting the experience of one into helpful knowledge for the next.

While this work is constantly going on in numerous forms, the institution which today must be more than ever relied upon to render this important service to society is the public school. The efficiency of the schools in rendering this service depends largely upon the extent to which the knowledge they impart is applicable to the conduct and conditions of modern society. As Dr. Nicholas Murray Butler aptly puts it: "The first question to be asked in any course of study is, Does it lead to a knowledge of our contemporary civilization? If not, it is neither efficient nor liberal."

It is no part of my purpose to detract from the value of any part of the public-school curriculum, but rather to plead that social economics should have a place in the public schools. It will be conceded that in our system of public education those subjects have the greatest claim to consideration which most directly lead to the character-making conditions of life. Nor will it be questioned that this may change with the progress of society. For instance, it is easy to understand that in the Middle Ages, when the common people were outside the pale of social and political recognition, no education was necessary for the masses. That which was necessary, being mostly for the clergy, might well be of a theological and classical character. Latin and Greek and abstruse theological doctrines were, of course, the chief requirements of the only educated class. But, as society developed and industry became an important factor in

public affairs, education must needs take a broader sweep. With the rise of manufactures and commerce it became necessary to extend education to the middle class.

As social life and institutions became more complex, a greater extent and variety of knowledge became necessary, if the future was to have the benefit of the past and progress to continue. So, with the birth to social consciousness of what Lassalle called the "fourth estate," it became necessary to extend education to the common people. Under democratic institutions, where the very form of government and conditions of industry are within the political control of the masses, the character of education through the common schools becomes a matter of paramount importance to civilization itself. The progress of the last quarter of a century has radically changed the importance of economics as a public-school study. Fifty years ago, for instance, when we were chiefly an agricultural country, with a little domestic manufacture, the industrial problems and social questions growing out of them were comparatively simple; but during the last thirty years this has all changed. We have become dominantly a manufacturing nation; our progress in this regard is unparalleled in the history of mankind. During the last thirty years our manufacturing industries, measured by the value of the output or of the domestic per capita consumption, has increased many times faster than the population. This has given us exceptional advancement in material and social welfare; which in time has brought a tremendous urbanization of our population, with new social problems like the sweatshop, the housing of the poor, the question of sanitation, of public charity, and many other quasi-economic and social problems growing out of city conditions.

On the other hand, this progress has brought with it a radical change in the organization and character of industrial enterprise. The once small individual concerns have been supplanted by corporations, and corporations have been superseded by syndicates, or so-called "trusts." These two sets of circumstances have created two new groups of social problems which are injecting themselves into the institutions of the country. Therefore, intelligent citizenship today involves a different and higher standard of intelligence and broader comprehension of public questions than fifty years ago.

Moreover, all this material and social progress, which has carried with it the spirit of individual independence, has made the ill-informed citizen a more dangerous element in the community than he was half a century ago. The growth of large industries and immense individual wealth has created in the mind, not only of the laborer, but of the economic layman generally, a feeling of distrust. They come to view all with whom they are in more or less competitive relation, and especially the rich employing class, as their enemies and the enemies of public welfare. When they enter the field of activity as citizens, whether in municipal, state, or

national affairs, they are dominated by this suspicious feeling which frequently amounts to a social prejudice. They look with distrust upon public officials, and the whole system of administration to them appears in the light of an instrument in the hands of the rich to govern society in their own interest. Nor is this altogether surprising when they see those who should be leaders of public opinion exercising the power of political dictators, buying and selling nominations for public office, blackmailing business corporations under the pressure of coercive legislation, and thru the power thus acquired corrupting the very sources of our political institutions. By these means, in not a few instances, a small coterie controls the government of large cities, and even states, and sometimes even the president of the United States is the victim of this unwholesome power. This has done much to beget in the public mind the belief that the rich are corrupting our government, dictating the public policy, and tending to convert our democracy into an oligarchy.

On the other side of the same picture are the city problems, to which I have already referred. There they see the poor ill-housed, huddled in unwholesome quarters under quasi-pestilential conditions. Poverty, vice, and the accompanying social degradation follow in their train. To this picture the revolutionist can point as one of the consequences of the great capitalistic movement, and appeal to the masses to overthrow the existing industrial system and adopt socialism as the only efficient remedy.

One of the greatest safeguards against the threatened disruption of society is the public school. At present, for the great army of youths who go from the public schools to the workshop, there is no mental preparation for intelligently dealing with these subjects. They are left to jostle against their fellows in the workshop, hear and feel the causes for discontent; they read the inflammatory and sensational stuff in the newspapers, listen to the more or less acrimonious discussion of social questions in their shop meetings and organizations; and all without the slightest background of educational preparation for forming rational judgments. The very natural result is that their opinions are made up from feelings and prejudices created by their economic environment. If the public school is to "lead to a knowledge of our contemporary civilization," it must necessarily furnish some mental training on these subjects which lie at the foundation of our social life, and furnish the material out of which public opinion is made and public policy is constructed.

This brings us to the practical aspect of the subject and raises the question of feasibility. In pleading for the introduction of economics into the public school, we may expect numerous objections from the traditional pedagogue. It will be urged, with considerable truth, that the public-school curriculum is already overloaded; that, instead of the student having more subjects, he should have less. It will also be urged

that economics is too difficult and complex a subject for the public-school student. It will not be denied that there is force in these objections, yet they might with similar force be applied to very many of the present studies. It may very properly be urged that education should be mainly directed to developing the mind rather than loading the memory. No education, and particularly that of the public school which stops before the age of sixteen, can furnish the student with much literal information. Indeed, that should not be the principal object. It should rather be the purpose of education to cultivate and develop the powers of observation and reasoning. To teach the student how to see and how intelligently to reason about what he sees is the most that can be hoped for in public-school education, and for that matter in college education too. It is not so much what the student learns at school as his ability correctly to observe and understand what he sees after he leaves school that is of greatest importance in his education. Whatever there is of value in education, it is as a preparation for seeing and understanding the environment.

It is a knowledge of principles, not a collection of facts, that school education should furnish. The time and ability both of student and teacher are limited. It is, therefore, a question of selecting subjects the study of which will best develop the mental powers of the student. If there are two subjects of equal merit as regards mental training, and one of them leads directly to the live interests with which the student will have to deal as a citizen, and on which his personal welfare and the welfare of the community depends, and the other leads only to the study of a dead language and the details of some effete civilization having only the remotest relation to the live affairs of today, there ought to be no difficulty in deciding which subject should be taken. That subject which leads to a knowledge of the affairs of modern life has a double claim, for besides affording an opportunity for mental training it furnishes preparation for useful citizenship. In this respect economics is pre-eminent, because, besides affording as high degree of mental training as these, it gives life to the study, and social equipment to the student.

Economics is pre-eminently a logical subject. It has to do with principles and deductions. It constantly calls the reasoning faculties into action, and it is pre-eminently the study that inspires observation. A study of the principle of wages or prices or rent or banking supplies its own incentive for observing these phenomena. It is equally important and more effective as a mental training than the study of history even; and far be it from me to belittle the study of history. But, in comparing the claims for mental training of history and economics, the superiority of economics is obvious. Even if we avoid the method of teaching history which takes note chiefly of battles, royal coronations, and court feuds, and direct the studies entirely to the important industrial, social,

and political events arising out of the progressive struggles of the people for improvement, it still remains chiefly a matter of memorizing. It is, indeed, of some consequence that the student know about the Norman Conquest, the Magna Charta, the Statute of Laborers, the Bill of Rights, the Declaration of Independence, the surrender of Cornwallis, and the Civil War; but it is far more important that the masses know what determines their wages, how improvements in industrial conditions are brought about, and what effect capital has upon the industrial welfare of the community. If they know something of the fundamental principles that govern their industrial and social welfare, they will have an intelligent appreciation of the significance of these historic events. But if they are ignorant of economic principles, these historic events, so many facts memorized, are of little educational significance.

Clearly, in furnishing mental training for the youth of the nation, and especially the youth that has but a limited share of educational opportunity, training should be given in the subjects which lead most directly to an acquaintance with the affairs of real life, thus at once affording the double purpose of mental training and preparation for social usefulness.

If it be objected that economics is too difficult a subject for the public-school student, we have only to compare it with some of the other subjects already in the curriculum. We find there astronomy, mathematics, chemistry, principles of hygiene, etc. If these are not too complex for the public-school student—and obviously they are not so regarded—then economics cannot be objected to on that score, for it has the advantage over all of these of being less abstruse and of dealing with more familiar objects and conditions and matters of greater personal and social interest.

The chief difficulty in teaching economics in the public schools thus far is in the unpreparedness of the teachers and the clumsy methods of teaching. Usually the teachers have had practically no preparation in the subject. They know nothing of the essential principles of economics; yet they are expected to take that subject along with mathematics and English, and perhaps Greek and Latin. The teacher usually adopts the hardest and least effective way, namely, sets the student to memorizing a lot of, to him, meaningless facts, instead of helping him to understand a few elementary principles, and makes what might be an attractive study a dry, wearisome task. Besides being much harder for the student, it is altogether less effective in developing a flexible mentality.

This comes partly of the habit of confounding teaching with investigation. Investigation is to discover principles; teaching is to impart them. The methods for the two are wholly unlike. The inductive method of investigation is to discover, verify, and classify facts, and then from a careful analysis of these verified phenomena deduce the law or principle. In teaching, the reverse method is the effective one, namely, to give the principle and then confirm or verify it by reference to facts.

This gives the student the key to observation and verification all thru life. Having learned the principle which governs the movement of the planets, he can by reading and observation understand the planetary system, but he could never have found the principle by any observation he could make. Hence, in the absence of the principle, he would be subject to suppositious conclusions.

While it is the function of the scientist to discover the principle by scientific study of the facts, it is the function of the teacher to give the principle to the student in the simplest intelligible form ; in other words, give to the student what science has discovered and verified, and illustrate and enforce it with as frequent reference to facts as possible, always taking the facts that are nearest to the interest and most vital to the life of the student. It will hardly be claimed that it is more difficult to understand the simple principle that wages in a given market, like water in a lake, tend to a level, which level is high or low according to the character and social life of the laborers, than it is to understand the principle of the formation of gases or the solution of problems in geometry. Yet, how wonderfully more important to the average citizen to understand the principle which governs the income of more than three-fourths of the population ! An intelligent conception of a few elementary principles like this in economics would be worth more to the citizens, and hence to the nation, than all the knowledge of Greek, Latin, and perhaps even history, that is taught. Not that these subjects are not important, but, as compared with the study of economics and its relation to educational preparation for citizenship, they are manifestly inferior. With the mental preparation for intelligent observation and logical reasoning, growing out of the study of the principles of economic and social phenomena, history, literature, political geography, and even the classics become manifold more significant. The history of Egypt, Greece, and Rome, the doings of pre-historic man, and social life under tropical civilization, have but the minimum interest beyond the mere noting of facts, when studied in ignorance of the laws of economic and political development. Indeed, in the absence of knowledge of these laws, such studies are apt to aid superstitious conjectures. In the light of economics these studies furnish an important adjunct to historic knowledge as throwing light upon the early conditions from which the present has been a slow and wonderful evolution. But to take the study of these ancient civilizations with blank ignorance of economic and political subjects furnishes the very minimum of educational stimulus and utility. From the point of view of educational importance, both in mental training and preparation for social usefulness, economics has a claim equal to any and superior to most subjects now in the public-school curriculum.

But the introduction of economics into the public schools would call

for one important improvement, namely, the raising of the standard of teachers. But that ought not to be regarded as an objection. There is no work performed in this country that is more important than that done by the teachers in our public schools. If we would make education contribute its best to civilization, we must resolve to have the most important subjects taught, and taught in the best possible manner, by well-paid, competent teachers. There is no expenditure too high, if it is not wasted; no talent too good, no system too well equipped or appointments too complete for the public schools of the United States. If the people of this country were only once impressed with this fact, the means would easily be forthcoming. It is only for the teachers and leaders of education to make it clear to the American people that in the public schools lie the means of the progress and safety of our institutions, and that the way to make the most of the public schools is to pay the price that will command the best teaching talent, and there will be little difficulty in adjusting the curriculum to the needs of the age. No excuse will be accepted for cramming children with dead subjects instead of rising to the level of vitalizing our educational system with the new and live subjects that lead directly "to a knowledge of our contemporary civilization." In the question of education, as in everything else in life, the demand creates the supply. Let the educators demand a live curriculum, a higher standard of teachers with adequate salaries, and the public school will be the ever-broadening bulwark of progressive industry, free institutions, and democratic civilization.

IDEALS AND METHODS OF ECONOMIC TEACHING

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The gentlemen who have preceded me have emphasized, as I felt sure they would, the paramount importance of economic training for the great mass of citizens in our democracy. The rapid sweep of industrial development is carrying its own argument for systematic instruction in economics from the college down as far as we can reach. The whole educational world is now beginning to see what the economist has foreseen for many years—that the strongest bulwark of democracy in this industrial era of ours is a widely diffused knowledge of the fundamental principles which govern social relations. It is not necessary to be a profound student of sociology to realize that there are possibilities of disaster mingled with possibilities of great good in the remarkable combinations of capital which have revolutionized our industrial system during the past decade. Even the casual reader of the newspapers understands with what

bitter distrust the wage-earner has followed the growth of the great corporations. We are now prosperous. The assertion that "the problem of the workless is the problem of the worthless" is at present quite correct. But, judging the future by the past, the economist knows that we are now riding on the crest of a wave of prosperity which will presently break and plunge us into an abyss of industrial depression. Then will come the real test of the stability of our social structure. The propaganda of discontent is now a voice crying in the wilderness. But when credit totters, when work is scarce, when wages are uncertain, the wilderness will be peopled with idle men and women. The vague sense of injustice will then be made keen and definite by hardship, and we shall not lack leaders of organized discontent, who will proclaim that whatever is, is wrong. They will array class against class, and will urge the use of the ballot to work radical changes in our system. The movement may take the form of a legal assault on combined capital; it may take the form of a cheap-money craze; it may take any one of a dozen other forms. The question which concerns us is: What response will the great mass of voters make to the appeal of the false prophets in the time of social stress, whenever it may come? Whether that response shall make for wise conservatism or destructive radicalism will depend upon the amount of economic intelligence diffused among the voters. And it behooves us, as educators, to see that this intelligence is as widespread as possible.

Under these conditions, the chief ideal of economic teaching should be the training of men and women to think straight and to vote right upon the economic propositions which are an ever-increasing proportion of the political issues in modern democracy. I do not undervalue the disciplinary possibilities of economics. Professor Patten, of the University of Pennsylvania, has urged, with his usual force, that the study of economics should be emphasized from the pedagogical point of view, because a subject which is in the transition stage from a science of induction to a science of deduction affords more stimulus for independent thought than a subject which is in such final form that the ordinary student has no ground for appeal from the "thus saith the text-book." I believe this is sound. But I feel that the highest purpose of the study of economics is the intensely practical one of giving the great mass of citizens a definite equipment for the special responsibilities of citizenship which have been thrust upon them in our day by the necessity for an ever-increasing public control of industrial relations.

And how shall we realize this ideal? The colleges, with their well-equipped departments of sociology and economics, will continue to educate the leaders of popular economic opinion, as well as leaders in other lines of thought. But the colleges reach a very small percentage of our people. The burden of training our citizens to respond to intelligent leadership on economic matters then devolves upon the secondary schools

and upon those institutions which, by popular lecture courses and classes, may touch the great majority who have passed beyond the influence of our public educational system without reaching the high school. The problem of the economic education of the masses, which is now becoming imperative, thus presents two distinct questions: What can the secondary school do toward this end? What can be done for adults thru lectures and classes along university-extension lines or thru the more permanent local organization of such agencies as the People's Institute of New York and the School of Social Economics? The second question is one of great importance, but the phase of the problem which has the largest claim on our attention here is the consideration of the mission of the secondary school in economic education.

What should be the content and method of a course given to boys and girls of high-school age? At the outset we should frankly admit the difficulties which beset the subject of economics, in order that we may define the limits within which it may be effectively taught in an elementary course. Read the economic journals, or attend a conference of economists, and you will be fortunate if you do not receive an impression of fundamental and irreconcilable differences of view among the authorities on the subject, which will make you feel somewhat doubtful of the educational value of a science the premises of which are thus in dispute. If you chance to go in search of the law of value and the theory of distribution, you will be precipitated into an arena wherein rages one of the most violent academic controversies of our day.

If you stop to consider the nature of economic science, you will not wonder at the uncertain condition of parts of its fundamental theory. The phenomena with which it deals are infinitely complex, and the investigation and classification of social facts have been carried on along modern scientific lines for only a very short time. Economic theory rests on psychological truths which are most elusive. This has led many educators to the conclusion that economics, as a whole, is too controversial for introduction into a grade of school where it is vain to expect the independence of judgment which is necessary for the weighing of evidence to reach conclusions. But it is very easy to overemphasize the unsettled state of economic theory and to lose sight of the great body of accepted truth which the science offers. While it should be recognized that much of the field of economics is debatable ground, it should not be forgotten that a considerable portion of the science is in definite and practically final shape. Certain fundamental social laws are as well established as any proposition in geometry. And it is within this pale of established economic truth that the secondary school must work, altho the student may properly be allowed an occasional glance into the arena wherein the opposing theories are struggling for recognition.

Take, for instance, the subject of money—the topic about which a

few years ago we all talked so much, knowing so little. The theoretical superiority of bimetallism or monometallism is one of the unsettled questions of economics. But the secondary teacher finds an ample store of absolutely fixed principles regarding the nature and use of money which explain satisfactorily the essentials of a sound monetary system—whether monometallic or bimetallic is a matter of indifference. Or, to take an even simpler illustration, the student pursuing the subject of franchises will finally cross a line of controversy and will find it difficult to strike the balance of argument in favor of and against the public management of certain monopolistic enterprises like railroads, telegraphs, street cars, and electric lighting plants. But a very brief excursion into the field of established truth will show the student that such franchise grants as have been made in most American cities—such gifts of public property to private persons as have just pilloried my own state and city in abject shame before the civilized world—are high crimes against society. And this knowledge is sufficient for the purposes of citizenship. Economics is a young and rapidly growing science, and its borderland is not defined, but its scope and method are entirely adequate to realize in elementary courses the ideal which I have already expressed, and to equip the future voter with the knowledge needed for the intelligent exercise of his duties in an industrial commonwealth.

But it is manifest, from this view of the subject, that effective instruction in economics demands high teaching skill. There is much lament over the fact that we have as yet no satisfactory text-book in economics. I have never thought it worth while to join the lament, for I am convinced that the writer of a generally acceptable text-book may do a great injury to the cause of elementary economic teaching by furnishing the very thing for which teachers have been clamoring. The greatest danger in elementary instruction in this subject lies in the fact that the student may absorb the half-truths of the text-book as social axioms, and go out into practical life to make most unwarranted applications of his rigid economic rules. If you would realize the possible harm of the general diffusion of a half-truth in economics, consider the effect on our generation of the persistence of a single economic axiom of the last generation. "Competition is the life of trade," our fathers said, and for their industrial conditions this was substantially true. But conditions changed, and we did not change our popular theory. Consequently we have wasted thousands of millions of dollars in attempting to establish competition in parts of the industrial field where competition has now become, not the life, but the death of trade.

The student of economics, however elementary be the work, must be impressed with the fact that it is impossible to furnish him a set of rules for the solution of all social problems. He must be taught that the principles he learns are to be applied with discretion to the varied conditions

he will meet. It is difficult to give this view-point to students who are bound closely to any text-book. It is true that the teacher who uses no text-book whatever may give his students the formal, rigid conception of the subject which is worse than no knowledge at all, but there is less danger from this source than from slavish subjection to a good text. A text-book I should certainly use for all elementary work in economics, and there are several that will serve very well. But the text-book which gives the student the impression of finality, and relieves the instructor of the responsibility of personal and original presentation of his subject, is, in my opinion, the greatest possible hindrance to good economic teaching.

The first requisite, then, for good work in economics in secondary schools is specially trained, thoroly equipped teachers. If such a teacher cannot be obtained, omit the subject from the curriculum, give such disconnected economics as may be worked into a course in history or geography, and then leave the student to the tender mercies of the partisan press and a not over-intelligent political platform. Unhampered by false teaching, indelibly impressed upon him at the time when his mind was most plastic, he will be more likely to arrive at correct conclusions in the discussion open to every reader of the newspapers.

Many enthusiastic advocates of economic teaching were disappointed in the oft-quoted recommendation of the Committee of Ten, and some denounced it as reactionary. The committee recommended, you will remember, "that there be no formal instruction in political economy, but that the general principles be taught in connection particularly with United States history, civil government, and commercial geography." A flood of light is cast on this recommendation for this manifestly unsatisfactory method of indirect teaching of economics thru the medium of history, civics, and commercial geography by this statement of the committee: "Few schools have teachers sufficiently trained to discuss and illustrate the general subject." Few, indeed, there have been, for the standard of competency is high. In this subject, as in many others, the qualifications for successful elementary work are much higher than those for advanced work. The instructor in elementary economics must not only know a subject of some difficulty, but he must have the rare power of selecting the essential and established facts from a mass of doubtful material, and of organizing these facts for vivid presentation. He must have a judicial mind, so that in presenting questions that are debatable he may give his class the impression of absolute fairness. Advanced students may discount an instructor's prejudices, but the elementary students are helpless in his hands. The success of his work is not to be judged by the quantity of facts regarding industrial history, trade relations, or labor conditions which he crams into his students, but rather by the attitude of mind which he cultivates in them. If he furnishes even a

small stock of facts which will help them to understand the economic environment in which they live, if he explains the settled principles of the science which will interpret the tendencies of the time, and if, above all, he establishes by example a habit of open-minded consideration of disputed questions, he has succeeded, and succeeded gloriously, in his mission. And experience proves that this is not an unattainable ideal. Conditions have changed since the report of the Committee of Ten was rendered. The universities are sending out year by year scores of young men and women splendidly equipped for economic teaching. A few years ago the colleges absorbed these teachers, but now they are available for secondary work. It is a reasonable hope that in the next decade they will establish secondary instruction in economics upon a plane which the Committee of Ten apparently considered unattainable.

I doubt whether it would be profitable to consider here, even if time permitted, the precise method of attacking the subject. One group of teachers believes in approaching economics by a purely descriptive route; another contends for an explanation of economic theory in advance of the historical description of economic conditions. Each party has text-books representing its specific method. My experience in teaching elementary economics has led me to believe that it is wise to choose the point of attack with some reference to the economic topics under popular discussion at the time. The development of the trust is the great question of the hour. Every high-school boy and girl knows something about it and has more or less interest in it. Many have a surprising amount of information, invalidated by a more surprising amount of misinformation, and positive prejudices of various kinds. But the main point is that there is initial interest, a point of contact. In opening a course, then, slide gently and rapidly over definitions and plunge into the trust. Capture your students, and you may safely take them a long and rapid flight back to the hunting and fishing stage of society, and develop with as much logic as you will the history of industrial development. They will then have your goal in view from the beginning, and will realize that it is worth reaching.

The laboratory method? Certainly. And in what subject can you apply it better? The social laboratory is all about the student; his home, his school, his father's factory, his community, the whole world as reflected in the newspapers. Arrange papers on assigned topics, reports to the class, debates—anything and everything which will teach him to think and will show him that there are two sides to the shield.

To those who believe that in the direction of popular economic education lies social safety the progress of the past few years has been most gratifying. Economic instruction is newly organized even in the colleges. It is less than a quarter of a century ago that a group of men returning from Germany gave form to the modern economic curriculum

of the institutions of higher learning. For a time there was little force available to spend on popular education. But economic instruction is now filtering down from the colleges, and the attitude of the real leaders of economic thought is fairly represented by Professor Laughlin, of the University of Chicago, when he says :

The work of research, however brilliant, is in a way of no greater importance to the good of our nation than that elementary teaching of economics to the great masses who never enter a college, but who form a majority of those who enter the polling booth.

THE TEACHER AS A SOCIAL-ECONOMIC POWER

REUBEN POST HALLECK, PRINCIPAL BOYS' HIGH SCHOOL, LOUISVILLE, KY.

The social forces have helped to accomplish all the greatest reforms of the centuries. The highest type of economic development never comes without healthy social growth. The genius of the twentieth century is calling to teachers to stop rainbow chasing for a few years and to learn to apply some of those great social truths which our sainted mother, the nineteenth century, left us as a legacy.

In order to have the greatest economic value the teacher must be social. In Switzerland higher wages are given to a good-natured milkmaid, who treats the cow kindly and sings to her while milking. It has been found that the cow under such treatment gives more milk. Under similar treatment pupils show increased mental and moral development.

The teacher who is anti-social commits a crime if he does not immediately follow some other vocation. Those vested with authority in the educational field, whether boards of education, superintendents, or principals, who try to rule teachers by the anti-social feeling of fear, are an abomination in this new era, as is also the teacher who tries to secure results from pupils by making them afraid. The slave-driver with his lash did not secure for the South the benefits that have come from free and willing labor.

The teacher who would be a social-economic power must learn and apply certain social theorems which psychology offers. Take the law of suggestion, which is so powerful in school and society. Suggestion deals with actions as well as with ideas, and it is the great social law of psychology. The power of suggestion is merely the tendency which one person feels to carry out the action indicated in an idea implanted in his mind by another.

The teacher who does not know the power lurking in suggestion is as dangerous in a schoolroom as a boy brandishing a revolver which is loaded, altho he is unaware of the fact. Every live idea is "loaded," and it will do either good or harm. I have known teachers to suggest to their classes more unsocial actions, more forms of disorder, more acts of doubtful morality, than the most brilliant rascals in the class could have devised.

I can remember how a temperance lecturer made my childish mouth water, the muscles of my throat contract, and an incipient arm movement develop by describing a sparkling, cool drink of champagne with its seductive fizz. His immediate "don't" was joined to no motor idea. I remember wishing that as fine a glass of champagne as he described was within reach of my arm. I have known teachers who habitually violated the most important psychological laws by suggesting vivid ideas of evil courses of action, thinking that a "don't" idea, an idea without form and therefore void, would inhibit the suggested action.

In a school where I once was, a snapping-match happened to be accidentally stepped on during chapel exercises. The principal then gave a vivid description of how wicked boys would take sharp jack-knives and cut the heads off snapping-matches and scatter them on the floor. The ideas of action thereby suggested were so clear and forcible that I thought what a nice thing it would be to have a sharp knife and a box of matches. There had at last been suggested in school one kind of action to which I felt myself equal. I wanted to do something; I didn't know what, but the kind principal had finally suggested the "what." For the next three days the school was in Fourth of July disorder. This might have broken up the school, had not a young psychologist on the teaching force asked the principal to tell the school that a long-wished-for excursion would be given the boys, if each one would get a vaulting-pole and practice with it in order to cross a stream where there was no bridge. If any more matches were brought to school, the excursion would not be given. Some of the larger boys who wanted to go threatened to thrash anyone who brought more matches to school.

As a corollary of the psychology of suggestion, we may frame the following theorem: Dislodge an idea of wrong-doing, not by a "don't" idea, but by a "do" idea. If the "do" idea is a social one, it will have quadruple power.

Imitation is another social law. It is really a child of suggestion. Here the first impelling force is an action which begets in the child's mind an idea, a tendency toward a similar action. The idea of an action always tends to complete itself and to produce the action. The more social the community or the school is, the more powerfully does imitation work. In a well-directed school of large numbers, the pupils learn more from unconscious imitation than from the direct instruction of their teachers. The folly of confining a pupil to the teaching of a private tutor is thus apparent. Such a child will tend to grow up unsocial. If at a future time he must do business with the outside world, he will be compelled to learn from associating with it at a time when there is no guiding hand to direct him. Social life should be taught both at school and at home under the direction of such a guiding hand.

Intelligent sympathy is a complex power which has never failed to

move the world. Whenever a teacher is found capable of displaying intelligent sympathy, the child-world will sit contentedly at his feet. Suggestion and imitation will work with double power. The old type of schoolmaster determined to adapt the child-world to himself. Sympathy requires the reverse step. The teacher must thru imaginative guidance reshape himself to fit that world. The teacher has been a child once; the child has never been a grown person. Psychology analyzes for us the basal elements of sympathy, and it is wise for every teacher to review them frequently.¹ To the teacher who would unlock human minds as well as human hearts, it should be said: "With all thy getting, get sympathy." Such a teacher is not only a social power, he is an economic power as well. He can raise to the fourth power the productiveness of a school, measured by both intellectual and moral growth.

One effective way in which to develop pupils both socially and intellectually is to make them do something for others as well as for themselves. Unless they are in some way taught to minister to the wants of others, they can become neither social nor economic powers in more than the barbaric acceptance of the terms. I protest that no single study or pursuit, whether manual training or English composition, is absolutely necessary for social growth. Either may be absolutely dwarfing; in fact, both as taught are usually dwarfing to social and imaginative growth. Young Indians learned manual training before any of our modern manual-training schools were dreamed of, but the Indian did not grow up a social being. I believe that English composition may be as productive of social development as manual training, altho in both subjects everything depends upon the teacher and his methods.

Since English composition is ordinarily called the most unsocial of subjects, let me suggest one of the ways in which it may be humanized and made palatable to the young. Less than two years ago there came to my school a letter bearing an English stamp and addressed "To the head boy." The writer, a brown-eyed English schoolboy, not quite fourteen, evidently tried to interest the "head boy" in his English school, sports, and home; and he succeeded. He then wanted to know something about Kentucky — its Indians, for instance. The letter had mistakes enough in it to make it seem human, but it was written for the love of it. That little Columbus had sent the letter out on a voyage of discovery to far-off Kentucky, and it proved a social stimulus to me and all my pupils. I read the missive to fifteen hundred people, and I noticed that they were sufficiently interested to lean forward to listen. The "head boy" needed no prompting to answer that letter.

I have made experiments enough in this interchange of letters between pupils to prove that the social stimulus thereby developed gives life and vigor and interest to English composition and improves it more than a

¹ See HALLECK's *Psychology and Psychic Culture*, pp. 257, 258.

hundred per cent. This coming year I intend to have an organized exchange of letters between one class of the pupils of my school and of an English school, and each one of my pupils will be taught to consider his English correspondent as a guest for whom the best is none too good. The exchange list may also embrace a distant school in the United States and in Canada. I hope to see an organized exchange of letters between schools, for this will result in a more stimulating and a more human form of English composition. If any teacher is unsocial or mean enough to ridicule the mistakes in letters received, then let him or his school be put on an official black list. This way of teaching composition gives eyes and ears to pupils, fires their imagination, and makes them appreciate the common things of life.

Those of you who have appealed to the social instinct of your pupils by having them read a book in order to tell its most salient points to their own class, or to write out for reading to another class a statement of why it would be profitable or not for the members to read the book, have found that the assigned task is performed in a far less perfunctory way.

A teacher who is a social or economic power will teach pupils how to set problems for themselves and others, as well as to solve problems that are already set. Social as well as economic growth demands this. The friends of a German engineer complained to an official of a large railway system that he was receiving but \$100 a month, while a young American employed at the same time had been advanced to \$250 a month. "This injustice is the more flagrant," said they, "because the German can solve problems that the American cannot touch!" "Yes, it is known to me," replied the official, "that the German can solve tougher problems than the American can, but your German friend sits as inactive as a toad and never makes any effort until a problem is brought ready-made to him to solve. The American has suggested problems that have resulted in changing the management of certain departments of the road. I once put your friend in an emergency position where he had to act rapidly on his own initiative. He was bewildered and returned to me for orders. I substituted the American. He plunged into things immediately and soon had them outlined. I remember that he turned over one tough problem to your friend to be solved. It takes a higher grade of mind to set problems than to solve ready-made ones. We shall still further advance the American's wages, but we can get all the ready-made problem-solvers we want at \$100 a month."

It is time to halt those pedagogical theorists who teach that education consists in knowing where to look for things. Where does an inventor look for a machine that is to improve the condition of the world? Where did Shakespeare look for his poetry? In this twentieth century social progress will render necessary new problems and new

solutions. What will become of the youths who have been taught that education consists in knowing where to look for facts? The world is today filled with those who want to know where to look for ready-made opportunities. There are a few who are making the opportunities, and the rest of the world is their debtor.

Arithmetic is, perhaps, next to English composition, the most unsocial of subjects. Make a child set problems for himself in arithmetic, and you will find that the social element will soon appear. A girl of eleven was asked how much a factory hand in a woolen mill would spend in the course of a year if he had a wife and two small girls. She folded her hands helplessly and said: "I can't get any answer to a problem like that." She was told that the answer was not so important as the statement of the problem in all its details. She lived not far from a woolen mill, and after a few suggestions she began to work to find the elements of the problem. She visited a grocery near the mill and learned what eatables were commonly purchased. She met and talked with some little girls, daughters of the operatives. She noticed what they wore, and, finding that they were really human, became very much interested in them. Again and again she submitted the details of the problem to find that they were incomplete. She persevered until her estimates were reasonably complete, but she was surprised to find that her problem, like the most of life's problems, from the cost of building a house to the profits per acre in market-gardening, had more than one answer. But in setting that problem she had grown in intellectual power and in sympathy with humanity.

A boy was at the same time asked how many horseshoe nails a blacksmith would need in the course of a year. The only details furnished were that this blacksmith was the only one in a little town of three hundred, and that he drew his custom from that and from an agricultural community of four square miles. The boy took an imaginary town and determined the probable occupation of every one of the inhabitants. Next he plotted on paper the four square miles, fixing the woods, hills, and streams, the farm acreage, the kinds of crops raised, the number of horses needed. Then he talked with blacksmiths and found that they were human. He blew the bellows, listened to the merry anvil chorus, stroked the noses of the horses, and found that they liked sympathy. He was a surprised boy to learn that if he worked up his own arithmetical problems, they had something to do with real practical human life.

If a teacher would be both a social and an economic power, he must teach his pupils, not to lop off their wants, but to want more and more things of the right kind. Dean Swift rightly said that to satisfy our desires by lopping off our wants is like cutting off our feet when we need shoes. Some English traders went into central Africa, thinking to find a ready market for their wares. But the Africans wanted nothing; they

were satisfied with their ignorance, squalor, unprogressiveness, and idolatry. The Englishmen said that before trade could be profitable there, the Africans must be taught to want something. When men lop off their wants in the material world, hard times and a panic ensue and children cry for bread. When men lop off their wants in the intellectual and emotional and moral world, the ideals of the nation are lowered. Then comes loss of Eden until greater teachers restore us.

Finally, we may say that when a teacher has mastered the law of suggestion on its social side; when he has brought into play the intelligent imitation of the best; when he has developed the potential capacity for sympathy; when he has influenced children to do things for others; when he has ceased to tell them that education consists in knowing where to look for facts, and has taught them how to set problems of their own to solve; when he has impressed on them that wealth depends not so much on mere saving as on the original use made of those savings; when he has made them understand that intellectual, moral, and social culture comes in larger measure, not so much in learning by rote other people's knowledge in those branches, as in drawing knowledge from the living well of experience; when he has taught them to have increasing wants, the result of high ideals—then, and only then, can the teacher become the needed social-economic power and raise to a higher plane the world with which he comes in contact.

OUR NATIONAL FLORAL EMBLEM

MISS EDNA DEAN PROCTOR, SOUTH FRAMINGHAM, MASS.

If we are to have a national floral emblem, let us choose one that is continental and worthy; one that will vividly suggest America whenever its name is heard or its real or pictured form is seen; one whose story is blended with our past and is in accord with our greatness and our destiny. A national emblem must be something full of significance to the country it represents. The rose and the lily are dear to England and to France because for centuries in camp and court, in council and fray, they have been an expression of the national life. The shamrock thrills the Irish heart because St. Patrick, when preaching to the chiefs and their clans, plucked a plant growing beside him and illustrated by its trifoliate leaves the mysterious doctrine of the Trinity. Scotland honors the thistle because it pricked the foot of one of the Danish invaders stealing upon the army at night, and his cry roused the camp, and the enemy was overcome. We all love the trailing arbutus, the columbine, the golden-rod,

but to choose one of these, or any other flower, as a national emblem, simply for its beauty of color, or for some fancied meaning in its form, is as incongruous and unworthy as it would be to select some pleasing song and say: "This shall be our national hymn." National hymns are not made thus! They are born of stress and passionate devotion, and consecrated in the nation's hours of grief and of peril, of triumph and of joy. So a national floral emblem is not a thing of unrelated, arbitrary choice. To be truly symbolic it must have been interwoven with the story of the land and the people, and its associations with them must be potent and enduring.

One plant we have, widespread enough and distinguished enough to symbolize our country, and that is our stately maize—the golden Corn. It is wholly and absolutely American—never a kernel in the world elsewhere till carried from here by Columbus. It grows from the lakes to the gulf and from ocean to ocean. It was the grain of the primitive peoples here—the aboriginal Americans—and with religious ceremonies of prayer and dance and song they invoked the blessing of their gods upon its planting and its harvest; they buried it with their dead, and offered it to the sun in their temples. It saved the lives of the first European settlers here, and it has been a vast factor in the civilization of the continent. From stalk to blade, from tassel to golden ear, it is uniquely and nobly beautiful, and it lends itself with grace and superb effect to varied forms of decoration. Our eminent historian, John Fiske, says of it:

Maize is more widely and completely identified with the western hemisphere than any other plant. . . . In adopting it for the national emblem we do not invent anything out of our fancy, but simply recognize an existing fact. . . . It is (I believe) richer in æsthetic suggestiveness than any other that has ever served as a national emblem.

How completely it is identified with our country was shown to a recent traveler among the fjords of Norway. Surprised to see some small stalks growing in the garden, she said to the innkeeper's daughter: "Why do you plant the maize when its grain can never ripen?" "Oh," replied the child, "we plant it to please the Americans! They smile when they see it, and say that in their land it grows like a forest, and the bins are filled with its golden ears before the snows can fall."

Do you say it is "commercial"? It *is* commercial, royally and grandly commercial; but this is its least claim upon us as a national floral emblem. It is a part of the history of the New World, and is invested with the tradition and sentiment and poetry of all the American ages.

Each state will choose its device after its own heart. California will have her poppy, Vermont the red clover, Kansas the golden-rod, and so on and on thru the long, bright list; but for the broad country how can we fail to adopt the beautiful, distinguished, historic, American plant—the maize, the Corn?

COLUMBIA'S EMBLEM

Blazon Columbia's emblem
The bounteous, golden Corn !
Eons ago, of the great sun's glow
And the joy of the earth, 'twas born.
From Superior's shore to Chili,
From the ocean of dawn to the west,
With its banners of green and silken sheen
It sprang at the sun's behest ;
And by dew and shower, from its natal hour,
With honey and wine 'twas fed,
Till on slope and plain the gods were fain
To share the feast outspread :
For the rarest boon to the land they loved
Was the corn so rich and fair,
Nor star nor breeze o'er the farthest seas
Could find its like elsewhere.

In their holiest temples the Incas
Offered the heaven-sent maize —
Grains wrought of gold, in a silver fold,
For the sun's enraptured gaze ;
And its harvest came to the wandering tribes
As the gods' own gift and seal,
And Montezuma's festal bread
Was made of its sacred meal.
Narrow their cherished fields ; but ours
Are broad as the continent's breast,
And, lavish as leaves, the rustling sheaves
Bring plenty and joy and rest ;
For they strew the plains and crowd the wains
When the reapers meet at morn,
Till blithe cheers ring and west winds sing
A song for the garnered corn.

The rose may bloom for England,
The lily for France unfold ;
Ireland may honor the shamrock,
Scotland her thistle bold ;
But the shield of the great republic,
The glory of the West,
Shall bear a stalk of the tasseled corn —
The sun's supreme bequest !
The arbutus and the golden-rod
The heart of the North may cheer,
And the mountain laurel for Maryland
Its royal clusters rear,
And jasmine and magnolia
The crest of the South adorn ;
But the wide republic's emblem
Is the bounteous, golden Corn !

THE EDUCATIONAL CRISIS IN ENGLAND

CLOUDESLEY S. H. BRERETON, MELTON CONSTABLE, ENGLAND

Mr. Chairman, Ladies and Gentlemen:

My first duty must be — and it is a very pleasant duty — to thank you most heartily for the great honor you have conferred upon me in asking me over to America to lecture to you on English education. I little thought a year ago, when I had the privilege of studying and appraising your excellent educational section at the Paris Exhibition, I should so soon have the opportunity of seeing on the spot the actual working of your schools and of meeting face to face the pick and flower of those who have built up, or are building up, this magnificent and unparalleled system of national education. The most casual observer cannot fail to be struck by the intense and fervent belief of American democracy in its schools, which is only to be matched by the fervent belief of the schools in American democracy. Such a happy conjunction between the two seems fraught with limitless possibilities. Every year the schools grow richer as more money and thought are poured into them. Every year they turn out a higher and more efficient type of citizens, ready, when their time of giving comes, to give as freely as they themselves have received. Believe me, deeply as I value the honor of being invited over here to speak on the problems of English education, I am still more grateful to you for giving me the chance of gaining some insight into your own.

No doubt, in part, some of this immense and rapid progress is due to the fact that you were able to begin, so to say, at the beginning, untrammelled by the excessive top hamper with which all countries of an older civilization are encumbered. I do not know how often, in seeing the ease and rapidity with which you have solved, or are solving, the various educational problems which confront you, I have experienced a regret that the age of miracles is past and that we, as a nation, cannot be re-created and born again, so that we too might start with a blank sheet, or *tabula rasa* so to say, on which we might erect a brand-new system of national education. And yet a moment's reflection has always convinced me that even the worst and most antiquated of our traditions, by which we are at times so sore let and hindered, are not without their uses. In fact, the problem is to modify rather than to abolish them. The curious habits and customs, the various modes of belief, the conception and ways of looking at things which have impressed themselves so strongly on English education, are not mere scaffolding by which we have been able to raise up, tier by tier, the mighty structure of national life, but are verily and indeed part and parcel of that structure, reaching down and extending to its very foundation and base, so that their complete removal, if it were possible, would be a distinct loss of certain elemental things essentially national, and their radical excision would be a mutilation of part

of those forces which make the English body politic what it is, and not something else.

If you agree with this view, I think you will readily admit that national education is not, as the mechanical-minded theorists of the eighteenth century imagined, a sort of machine you could clap on to this or that nation, whether English or French, European or Asiatic, in the sure and certain expectation of turning out exactly the same finished article, true in every detail to pattern and specification, a kind of education-made automaton, a great monstrosity, if it really existed, like that other figment of the eighteenth century, the economic man, so dear to early writers of political economy. If the spirit of the nineteenth century, which has just passed away, had one message for us, it was to substitute for this mechanical theory that of evolution; to dethrone the belief in cataclysms and sudden changes, in favor of the view of sure but certain processes; to restate the problem of progress in terms of living growth instead of artificial manufacture. It denied that the child is a mere lump of clay to be puddled and molded into some conventional type, as tho, forsooth, the Lord God had not already breathed into it a soul and a personality. On the contrary, it asserted that it is the bounden duty of the teacher to respect the child's individuality—a practice which you, to your eternal honor, have more than any other nation held to and maintained. It no less vigorously affirmed that it is the bounden duty of the statesman, in whatever reform he may undertake, to respect the genius and individuality of his nation.

For nations, as I consider them, are not mere undisciplined aggregates of competing individuals, but organized social wholes, to whom national education bears the same relationship as the flower to the parent plant. If I had to give a definition of national education, I would define it as the outcome, half conscious, half unconscious, of the desire of the more thoughtful members of a nation to hand down to the rising generation the experience, ethical, intellectual, and practical, of the race, in order that they may continue to develop the nation on its own line, and realize more fully and perfectly the ideals, whether existing or naissant, in their own hearts.

They desire, it is true, to render their sons more efficient for the battle of life, yet, knowing that man cannot live by bread alone, they are anxious to see instilled into those that come after them those moral standards and aims which they believe to be the most precious heritage they have received from their forefathers; which form, so to say, the very bed-rock of national character and temperament, and enable a nation on the morrow of some crushing reverse or defeat to pull itself together and go on. In a word, the school should be the microcosm of all that is best in the national life and ideals, and its further progress largely depends on its becoming more and more the mirror of these high hopes and aspirations.

But perhaps someone will say: This theory may square very well with

European conditions, but our American schools are none the less one of the most efficient machines the world has ever known for converting into American citizens the countless children of the strangers that are within our gates. It is quite true that the American schools do literally help to transform the child of the newcomer into an American citizen, and it is indeed one of the chief glories of the American schools that they are able to effect such a conversion as deep and thoro as any other conversion, religious or otherwise.

But such a fact is not against my theory. On the contrary, it is a striking proof of how a nation is really a social whole, which demands, in the name of national unity, the assimilation of the individual of the national type. It emphasizes the vigor and genius of the American national character that it is able so thoroly to leaven, permeate, and transform these foreign elements. It illustrates incidentally the fact that American education must proceed along the lines of American ideals, which is only what I have been urging in reference to England.

But I would not have you think for a moment that I wish to see a Chinese wall thrown around a nation or a nation's schools, in order to shut out and exclude all foreign influences. On the contrary, I am most anxious that in education, as in commerce, we should maintain the policy of the open door. Never in the history of the world, as far as one can judge, have the nations, and especially the English nation, been under a deeper obligation than at present to learn and copy from one another what is best. Besides, education in its highest sense is the raising and uplifting, not only of each of the several nations, but of all humanity; as such it cannot be shut up in water-tight compartments or separated by impassable boundaries. What I do contend for is this, that we cannot profitably copy the methods of other countries till we have got a clear idea of the condition and genesis of our own education. In other words, we must first be able to state the problem and appreciate its main factors before we can say whether this or that solution, however excellent it may be on abstract lines, however well it has worked in other countries, is really applicable in our case.

But this seems to me to be the place to mention another factor which appears to me second in importance only to that of national character in considering the problem of national education. Nations are not only divided by what they have inherited from the past; they are also differentiated by the diversity of their destinies. To understand the problem of national education we must not only ask from what the nation has come, we must also inquire whither it is going. For the school is not only the trustee of the past; it must also take thought for the future. Now, it seems to me that the problems with which every nation has to deal tend to group themselves around some central problem, which, in its turn, gives its own particular hue and color to the others. Let me

come at once to concrete instances to show what I mean. Anyone conversant with French life will, I believe, readily admit that the fundamental problem in France is the religious problem. In fact, you cannot scratch, or even touch, the surface of any other problem without at once coming in contact with some of its seemingly endless ramifications. In Germany it will probably be readily admitted that the central problem is the reconstruction of society. Here in America, if a passing visitor may venture on an opinion, the problem with which you have to deal is that of the adjustment of the relation of capital and labor; while in England, it seems to me, the coming problem, if it has not come already, is that of imperialism. One might almost think it was a sort of divine dispensation that each of the chief civilizing states of the world is set down, as it were, to work out its own salvation on different lines, so that the other nations, if it succeeds, may enter into its labors; for no nation liveth unto itself alone, but to the benefit, in the end, of humanity.

The bottom problem, I repeat, in England is imperialism. To prevent any possible misunderstanding, let me attempt to state what I mean by the term. Of course, it has nothing to do with that militant spirit of spread eaglesism we call jingoism; it is not mere flag-waving or any other form of human cockadoodleism; it is not land-grabbing; it is not the insane wish to paint as much as possible of the map of the world red, or whatever the national color may be. On the other hand, it seems to me stupid, if not criminal, to shut our eyes to the fact that our empire, even if we do not add another rod to it for fifty years, is already enormous.

Speaking roughly, we, a nation of bare forty million souls, are responsible to Almighty God for the lives, fortunes, and happiness of some four billions. Are we, like unworthy servants, unmindful of our high responsibilities, going to hide our talents in a napkin and do nothing, or are we going to attempt to take up as best we may the "white man's burden"? To me it seems there is but one alternative. If we are not to share in the fate of Tyre and Sidon, Macedonia and Rome, we must do our duty toward this great empire, not running it for our own selfish profit and pleasure, but for the welfare of all that are in it. Otherwise our fate is certain, be it long or short in coming. I feel in this matter we have your sympathy. To you, too, the call of empire has come, and, after long counting the cost, you, too, have put your hand to the plow, and, having put it, show little sign of turning back or of refusing to accept the greatness thus thrust upon you. But we cannot do our duty to others until we have done our duty to ourselves. If we are to run the empire as we should, we must put things on a far more efficient basis at home, not only in the way of social and economic reform (of political we have had enough and to spare), but also in education.

Now, English education is at present in a chaotic state. In some places there is overlapping and friction between competing schools and

conflicting local authorities; in others the educational supply is miserably deficient. What is wanted at the present time is organization and co-ordination, not indeed uniformity, but unity, or at least harmonious working, between the different educational agencies. This cry for unity that is voiced by so many is, however, no new thing. It has been raised again and again, yet hitherto has always met with failure. The causes of this failure lie deep. They can be disclosed only by an inquiry into the reasons in the history of English education that have led to the present complicated position. I shall, therefore, attempt to give you, in a rough and ready fashion, some insight into historical causes, and, dividing the problem into two parts, deal first with the local and then with the central authorities.

The beginnings of English education were religious. The ethical bias in English education must never be lost sight of when any estimate of the problem is made. The Reformation only transferred the school from the church to the king, not as the head of the state, but as the temporal head of the church. This, of course, only applies to the secondary schools.

The seventeenth century was a blank as far as education of the working classes was concerned. At the commencement of the eighteenth century we find Sir Richard Steele pleading in the *Tatler* for the education of the poor. His cry did not fall on deaf ears, and produced a movement within the established church which led to the foundation of the so-called charity schools (under the auspices of the Society for Christian Knowledge). These schools at first grew and increased, and at one time contained as many as twenty-six thousand children. But opposition soon appeared; on one hand they were attacked by those who complained of their superficiality; on the other, by those who asserted that it made the poor discontented with their station in life. There was no idea of seeking the help or assistance of the state. The great English radical, Priestley, who had inherited the *laissez-faire* traditions of 1648, was dead against the notion. It is not until we come to Adam Smith that we find the idea of a state system of primary education mooted. He had been influenced by the ideas of Turgot and the working of the Scottish system; unhappily for the future of secondary education, he was utterly opposed to state aid or intervention in the sphere of higher education, looking on it as likely to lead to intellectual tyranny.

So at the beginning of the nineteenth century there were two tendencies in education, one laying stress on the ethical, the other on the intellectual side; the former represented by the now languishing charity schools, which were suffering from the attacks of the obscurantist faction in the church, who disbelieved in education for the working classes; the other, by the philosophical radicals, who were advocates of the state system of primary education, but encountered opposition from

extremists of the Priestley school. The first attempt to establish a national system of primary education was made as far back as 1806, by the celebrated Quaker, Mr. Whitehead. He attempted to conciliate the clerical party, but failed to overcome the opposition of the obscurantists. But the problem itself became more acute. During the Napoleonic war we were passing from being a rural to an urban people. The industrial revolution was at its height, the slums were growing at an alarming rate, our working classes were half-starved thru the high price of corn, and the horrors of child labor grew and intensified. State aid having failed, the philanthropist stepped into the breach. Robert Raikes in 1810 started the Sunday schools. The numbers in these schools rose rapidly to half a million, but after 1810 they devoted themselves to the Sunday side of the work. Then the Royal Lancastrian Society was founded to extend the monitorial system of one Joseph Lancaster, a Quaker, and became in due course the British and Foreign Bible Society. Its methods were crude; knowledge was looked on as a sort of liquid that naturally found its own level in the pupil, who acted as a sort of tank or receptacle thru the monitor, who was regarded as the pipe or conduit, and therefore did not require to know more than the pupil, being what we should call, in theological language, a sort of unconscious channel of grace. These schools were, nevertheless, highly favored and supported by Bentham, the elder Mill, Francis Plaice, and other radical reformers of the time.

The activity of the non-sectarian British and Foreign School Society naturally awoke the slumbering energies of the other party, and a rival society, called the National Society, was started by churchmen. People looked complacently on the rivalry of the two societies as a kind of sporting affair, hoping that the better would win—a spirit, I fancy, not altogether unknown in America. Unfortunately the two societies did not cover anything like the whole ground. In 1820 Brougham pointed out that out of twelve thousand parishes only five thousand had any sort of school at all, and many of those were little better than dame schools. He himself tackled the problem of state education, but failed, thru the impossibility of finding a *via media* between the church, the church people, and the *laissez-faire* nonconformists. Meanwhile the British and Foreign Schools were not fulfilling the expectations they had raised. As we have seen, their conception of the child was all wrong, and they confounded education with instruction, in thinking they could solve the social problem by teaching a little spelling and the multiplication table.

From the passing of the Reform Bill till 1870 the middle classes were having a good time in England, as good as the middle classes in America today. Trade was going up by leaps and bounds. Everyone was feeling yearly a little richer. It was an epoch of intellectual output.

Tennyson, Dickens, and George Eliot were in their prime. There was very little dwelling on difficult or ultimate questions. A superficial optimism, of which Macaulay was often the mouthpiece, was the fashion. There was a general feeling that things would work themselves out all right. It was the golden age of *laissez faire*. So much for the articulate classes, but the actual life of the inarticulate classes was far different, and we were really sowing the seeds of the numerous social and economic problems that of late have sprung up around us like magic, and are clamoring simultaneously for solution.

The year 1832 is memorable as the first instance of state aid in the history of national education, when a building grant of £20,000 was given to the two societies. In 1835 a royal commission was appointed, which revealed the educational nakedness of the land. Once more an attempt was made to establish a national system of education; this time on undenominational lines. It failed before the opposition of the church. A further attempt to secure education for factory children was unsuccessful, this time the opposition coming from the party opposed to state intervention, John Bright and Baines. At last a *via media* was found. In 1846 the government adopted the system of subsidizing the denominational schools. During the fifties we see the beginnings of the ideas of local control in the schools, and the birth of two great questions—one, whether education should be a branch of municipal and local government, or intrusted to a special *ad hoc* body; and the other, the still thornier one of aiding denominational schools out of the rates. Meanwhile the reforms introduced by Arnold at Rugby had extended to other schools, and made our public schools what they are today, the nurseries of public spirit and *esprit de corps*.

The electoral reform of 1868, and the sweeping Liberal majorities that followed, tended much to weaken the dislike of the *laissez-faire* radicals to the state, with which they began to identify themselves more and more. This reduced the four opposing currents of thought to three, and opened the way for Mr. John Forster and his celebrated education bill of 1870. Three points require to be very strongly noted as regards this act. One, that the elected school boards were avowedly only to be created in districts where the educational supply was lacking; they were merely intended to fill up the gaps in the then existing system of voluntary education. While, to afford the voluntary schools a last chance of covering the ground, a year's grace was given under the bill, during which they were to be allowed to attempt to build as many schools as possible. They made such good use of the opportunity that they raised some three million pounds for school buildings. When the year was up, and the competition began, they had already received an immense start, and tho the school boards have since made enormous progress, the majority of elementary children are still in denominational schools. The second

point to note is that the government grant to these schools has steadily increased, so that today these so-called voluntary schools receive the equivalent of four-fifths of their expenditure, and in some cases still more, out of the public fund; yet, except as regards examination and inspection, they are quite outside the sphere of popular control. The third point to note is that the first draft of Mr. Forster's bill proposed to make the existing municipal councils the local school authorities for the towns. But, as some of the radicals objected to indirect election, and the various denominational bodies insisted on a representation of all parties and all religions, we had the establishment of school boards in the town, which, apart from the religious wrangling, have generally done very good work, and the establishment of the little district boards in the country, which have worked, as a rule, very indifferently. As there is no great popular feeling in favor of education in country districts comparable to that in America, the country school boards have been mainly manned by persons who have got themselves elected for the purpose of keeping down rates.

Not a few persons in England consider it unfortunate for the cause of popular education that its destinies should have been linked at the start to a form of local government which was rapidly falling into discredit thru the rendering the life of the English ratepayer a burden, and hindering the growth of local patriotism. It was estimated by Mr. (after Justice) Smith in 1876 that some unfortunate householders in London were living under the government of something like fifteen distinct *ad hoc* authorities, being in one area for the school, another for water, another for gas, another for health, another for registration of birth, another for burial purposes, etc. The reform of English local government was taken in hand in 1888, when the old county area was chosen as the unit, and the functions of the majority of these *ad hoc* bodies were merged in the new authority. Towns of over sixty thousand inhabitants, together with a few whose population was under this figure, were eliminated from the county and made co-equal independent bodies under the title of county boroughs. This is a most important point. Had the present county unit existed in a democratic shape in 1870, we should probably not have had an *ad hoc* body chosen to supplement merely primary education, but the county unit would most probably have been adopted to look after all forms of education in its area. The proof of this assertion lies in the fact that the county council and county borough council were made the authority for technical instruction in 1889, and not the school board, for the simple reason that their areas were co-extensive with the whole country.

There being little or no technical instruction at the time, the county council and county borough council soon found it necessary to expend a large portion of the grant they received from the government for technical

education in aiding hundreds of secondary schools in order that the pupils might be better prepared to enter the technical schools and classes. They have, therefore, become *de facto* in England in many localities, the local authority for secondary education. Their position has further been strengthened thru the government grant for science and art being in many places also paid thru their hands.

Meanwhile, especially in the towns, school boards thrive and expanded; extra standard classes were soon added to the ordinary classes in the three R's; and the regular superstructure of higher grade education evolved. In this forward policy the school boards were, up to a recent date, encouraged by the two departments intrusted with the oversight of elementary and of science and art education. Certain of the London ratepayers, however, took alarm at the growing expenditure of the London board. The matter was brought into the law courts, and the whole of this new top story has been declared illegal. For anyone but an obscurantist in education the question is whether these classes should be recognized as higher primary, as in France, or as frankly secondary. If the latter alternative is adopted, they will at once be authorized to enter into competition with the existing secondary schools, many of which are under the tutelage of the county councils, and the skirmishes which have hitherto taken place between the two rival authorities will degenerate into a battle royal. In fact, recognition of two rival authorities, each possessing equal rights to give the same grade of education, can only lend itself to an intolerable amount of friction and overlapping, and unnecessary expense; so that the British ratepayer is not unlikely to strike. Unable to discriminate between the two, he will cry "a plague on both your houses," and the cause of education is bound to suffer in the end when people see how these educationists love one another. Furthermore, the present muddle is intensified by the overlapping which has been going on in the evening classes for adults; between the classes run by the county councils and the school boards in the town when they have not been regulated by voluntary concordats. And, finally, we have before us the grave question of whether we mean to crush out the private schools. There should, indeed, be short shrift for the inefficient; but the private school which is doing its work seems worthy at least of recognition, if not of encouragement. Both in France and Germany there are distinct signs of regret that the private school, which, if efficient, is always a center of emulation and experiment, has become such a *quantité négligeable*.

The act of 1870 was a statesmanlike compromise between the denominational and the undenominational parties in the sphere of primary education. What we need today is a second compromise between the two schools of thought in the sphere of secondary education. In 1896 an attempt was made to make the county the chief local authority. It

failed ; this time largely thru the carelessness with which the bill was conducted in Parliament, and also from the jealousy shown by the small non-county boroughs toward the counties in which they were situated. This year again a bill has been presented which proposed once more to make the county the paramount authority. I understand it has been withdrawn owing to the exigencies of the parliamentary session.

And yet it seems to me, if we are to have educational unity in England, the county council is the only possible authority we can have for local purposes.

But before stating the case for the county council, let us first consider the other alternative. At first sight, in order to do away with the existing rivalry, it might seem expedient to disfranchise the county councils of their educational rights, disestablish the school boards, and hand over the educational duties of the two bodies to an entirely brand-new authority. But this suggestion, tho possessing all the special attractions of symmetry and completeness, would arouse the most prodigious opposition. The two interested parties would fight it tooth and nail. Localities would be up in arms, and local M. P.s would voice their opposition in Parliament. All officials under the existing bodies would be dead against any proposal that jeopardized their positions and salaries. It would be actively fought by that small but growing body of social reformers who, as partisans of the municipal idea, believe that politics can be made real to the man in the street only by consolidating the various functions of local government in one body and doing away with the bewildering multiplicity of elections. And, lastly, such a body would be certain to inherit from the old school boards the spirit of religious wrangling that has proved such a fruitful source of hindrance to the cause of popular education in England. The objections to the school boards being made the one authority for education are scarcely less formidable. They are an *ad hoc* body ; they are at present only a makeshift form of organization existing in only two-thirds of the country, and catering for less than half of the children, the majority of whom are in voluntary schools which have been avowedly built and maintained to keep out the school board on religious and economic grounds. The attempt to make the school boards the authority for such a neutral subject as technical education failed in 1889. Their chance, therefore, of being made the secondary authority, now that the technical-education committees of the county councils are in full swing, is still more remote. They have but few friends among the Tory party, and even supposing the Liberal party came back to power with a thumping majority, it would have the whole of the Irish vote cast solid against it, on the question of making school boards the chief authority, as the Irish desire rate aid for Catholic schools in the north of England.

There remain, therefore, only the county councils and the county

boroughs, and this is fortunately no Hobson's choice. They have, indeed, much to recommend them. Their areas are co-terminous with the whole country; they are also sufficiently big to exclude the election of the crank and faddist, and secure a certain amount of ability and large-mindedness in their representatives. They have already acquired administrative educational experience in dealing with secondary and technical education.

In the counties it would probably be advisable to abolish at once the small boards which have little to recommend them. The evicted members might be reinstated as managers in order that what administrative experience they have might be preserved. But the advent of county-council administration would probably mean a rise in the standard of the schools and greater security of tenure for teachers. The principle of popular control would be maintained by the proviso that the educational committee of the county council should consist of a majority of members of the council, while the educational side would be safeguarded by the election or co-operation of educational experts to represent the various types of schools.

The county councils would be allowed to levy an educational rate over the whole country, or rather merge the education rate in the county rate. Being the authority for all forms of education, they would naturally have a right to inspect, not only the board schools, but also those of the voluntary schools which wished to come under their régime to qualify for efficiency. This idea of subsidizing the voluntary school seems a bitter pill to some people. But it appears to me just one of those cases where the stern logic of fact is superior to the reasoning on mere abstract principles. Assuming that the voluntary schools are, as their adversaries allege, inefficient, have we a moral right, looking at the question from the national point of view, to allow more than half our children to suffer under permanent educational disadvantages until the voluntary schools are starved out in the dim and distant future? Are not the rights of conscience of the sectarian equally respectable as those of the secularist in the eyes of the state? We have spent thirty years in trying to ignore the religious question. The effect has been, so far, such a qualified success that we have not as yet attracted half the children of the nation into our state schools. We have given state aid to the extent of four-fifths of the expenditure in the denominational schools, and have received in return nothing but the right to inspect these schools. Why should we haggle over the remaining fifth, if we can purchase with it a certain measure of popular control over these schools, save and excepting in the presence of religious teaching? Are we not far more likely to raise and widen the outlook of these schools by inducing them to come under county-council control than by any measures that smack or savor of persecution? We want to find points of contact between the different ideals that divide England; we do not want to set them in harsh opposition.

In the towns, the school boards have done yeoman service in the cause of popular education. Yet it is obvious we cannot allow two public bodies, each professing to do the same kind of educational work, to remain in perpetual competition with one another. From the national point of view there is no gain whatever from such a clumsy and expensive duplication. It can mean only the perpetuation of the educational schism which has hitherto divided the nation. To leave the county councils with only the control of the present grammar school is to narrow their conception of what secondary education really means, and another ten years of the present régime may make them into partisans despite themselves. At present, both in theory and practice, they are really far more democratic than the existing school board. They are elected on the ordinary and not the cumulative franchise, while the number of votes cast at the borough-council election in the towns is always much larger than that cast at the school-board election. Thus in London at the last county-council election about 70 per cent. went to the hall, while the last school-board election barely interested 20 per cent. of the electorate.

Yet, if the county councils are to absorb the school boards in the town, the transference must be very carefully and gradually made. These latter bodies have acquired a wealth of administrative and educational experience which it would be hard, if not impossible, to replace immediately. There must be no forced liquidation, but they must be taken over as going concerns, their best members being co-opted at once on the borough council education committee, in order that the break in continuity may be as little as possible.

The following advantages, from the national point of view, which would result from the adoption of the county council as the one local authority, should also be noted :

With a single authority in each area, controlling all forms of education, it will be at once possible to detect and correct overlapping, and supplement any deficiencies in educational supply. Again, the needs of each locality necessarily vary. The single authority, more or less supreme in its own area, will be able readily to see at a glance the needs of its district and to call for them accordingly. There is plenty of work and more than enough for the existing type of schools. What is wanted is to regulate and define more carefully the function of each so they may be as readily understood by the people as they are in France or Switzerland. Half the want of interest in the schools which exist today in England is due to the impossibility for the ordinary man to make out what they severally stand for. People cannot be enthusiastic about their schools till they comprehend their exact aims. If we cannot harness the Niagara of national interest in education to our schools, as you have done in America, we can yet do a great deal in the way of deriving power by hitching the school on to the latent forces that lie at the back of local patriotism in England.

Coming now to the question of the central authority, it is enough to say that primary education was originally under the education department, which, like many other departments of state, was at first an appanage of the privy council. The latter is the real source of an unexhausted executive power in England, and may be compared to the sun in its potentiality to throw off some new department of state when a new administrative want makes itself felt.

Science and art teaching, which dates back to the great exhibition of 1851, was under the science and art department, which was later on made the authority for technical education. The endowed schools were controlled by the charity commission, whose oversight, however, was mainly financial. The present board of education was evolved out of the two above-named departments, with power to take over certain functions from the charity commission. The new office was divided up into two sections, primary and secondary, and technological. The latter section shows sign of splitting up into two parts, so that there will probably in the end be three sections in the office. Hitherto, owing to the miserable system of payment by results, the office has been overwhelmed by questions of detail and audit. The establishment of the block grant may perhaps set it free to study the admirable collection of reports which have been amassed by its special inquiries section, in order to enable it to frame general principles of control. It has also been furnished with a consultative committee of experts; these no doubt should serve as an admirable go-between in their dealings with the schools on their pedagogical side; but what they really most require at the present time is an efficient secondary inspectorate that shall serve, not only as the mouth-piece, but the eyes and ears, of the board. Otherwise they will be like those lay figures that have eyes, but see not; ears have they, but they hear not. Much, again, of their routine work should be delegated to the local authorities.

The true function of the board of education seems to be something of a mean between your bureau of education and the strong centralized ministry of public instruction in France. I cannot define this function in better words than those of our greatest writer on education, Mr. Michael Sadler. He is speaking of the part of the state in national education, and, after dismissing the individualist idea that the state should have no part in national education, and rejecting Adam Smith's opinion that it should provide only primary schools, and Mills' view that it should establish a system of schools of its own among other competing systems, he goes on to lay down that the state should rather draw toward itself, inspire, stimulate, and (when needful) aid each and every type and instance of efficient and needed schools, while absorbing, controlling, crushing none; aiming, not at monopoly, but at a comprehensive federation of schools and colleges; at strengthening educational

freedom, not at any restriction of it; at self-criticism, not at the discouragement of criticism; at the planning and record of careful and systematic experiments; at the very liberal encouragement of educational, psychological, and hygienic research of all kinds, in all types of schools, and those not in England alone; at the wide diffusion among all concerned of the accurate, but varied and outspoken, observations thus secured, with a view to the development and guidance of a well-informed and skillfully observant public and professional opinion.

Such seems to me to be the present position of English education and its principal shortcomings; and, in speaking so plainly of our failings, I do not wish you to imagine for a moment there is little to be said in praise of English education. My abstention was rather intentional, because it seemed to me scarcely the place to say it; and yet, as one reared in the traditions of our English public schools, who has breathed their subtle atmosphere, as strong and life-giving in its way as that of your American schools; who later on, as a teacher, has attempted to maintain and spread their high-soaring and deep-rooted traditions, I feel it is only fair tonight to express in public my eternal gratitude toward those public institutions which instilled into me, unforward scholar that I was, some scanty sense of the high ideals of patriotism; of *esprit de corps* and of serving the state, of *noblesse oblige* and the non-existence of rights unaccompanied by duties; of the virtue of self-control; of the spirit of never-say-die; of the belief in fair play and other national qualities which belong pre-eminently to the Anglo-Saxon race. And if I also look on France as a sort of foster-mother who, taking me late in life, deepened my ideas of culture and philosophy, it is because she gave me thereby a sort of *intellectuelle Anschauung* into the *habits* of English public-school life, and helped me better to understand myself and my great debt to these ancient and religious foundations. I might also point with pride to the work of the great school boards, like those of Leeds and London, to show what thirty years of popular effort have done for the working classes, or extol the energy of the technical-education board for London, which in ten years has literally created the present network of technical education out of nothing.

But my object is not to praise or blame our national education, but to render it intelligible. I greatly fear, however, I have not infrequently been obscure, owing to the lack of time to set forth each proposition and idea in its due light and proportion. If I have failed, I shall at least have had the melancholy satisfaction of making you realize the extraordinary complexity of the problem by explaining the obscureness per obscureness.

There are, however, two ideas which I would wish you to carry away with you. One, that a trim and geometrical system of education is probably impossible in England, not because of the stupidity or indifference of the English people, but because of the diversity that exists in

the national character, and the extraordinary sensitiveness of the English people to fundamentals, about which they rarely argue, but which, as the suppressed premise, give weight and direction to their arguments. I think no nation feels more deeply, or experiences greater difficulty in putting its feelings into words. I fancy at times it even half-consciously shrinks from doing so.

The second is that any satisfactory settlement of the education question, or even temporary *modus vivendi*, must recognize this diversity in the national character and give fair play to the various sets of opposing tendencies which are not always symmetrically ranged under one banner or party, yet are ever carrying on a perpetual duel in England, as pre-figured by the battle between freedom and authority, between the spirit of inquiry and that of obedience, between individual liberty and state control, between private effort and corporate life, between the ethical and the intellectual conceptions of education.

This English duality, which Emerson himself has remarked upon, makes us appear at times strangely undecided, irresolute, illogical, and cross-grained; but there are moments when, as Pascal says, the heart has reasons, the head knows not.

Yet I do not wish to imply that we should be forever halting between two opinions, and that there are not occasions when we must make up our minds to take a decided step. No one is more convinced than myself at the present time that we have need of overhauling the ship of state and putting her into a better state of repair, making jettison of certain of the *laissez-faire* notions with which we are encumbered and taking in a fresh consignment of state control. I only ask you to judge us gently. Our responsibilities are indeed great, yet I have no doubt whatever, once we have truly realized them, we shall prove fully equal to the task. For my part I cannot entertain the idea that the Anglo-Saxon race, whether on this side of the Atlantic or the other, can ever go under.

THE FUNCTIONS OF A UNIVERSITY IN A PROSPEROUS DEMOCRACY

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There is one special respect in which the university proves to be of great advantage to organized religion. The university helps to show to the world the relative worth of the church and the relative lack of the worth of churches. The church is founded upon the primary belief of the existence of a personal God, and upon the derived belief that the will of this Being is made known to the will of man, and also upon the

derived belief that the will of this Supreme Being is to be obeyed by man. Churches are founded upon some adaptation of application or corollary of this fundamental conception. The university is concerned with truth in large relations. It therefore investigates and presents the primary conception on which the church rests. It therefore is an aid to the support of the church in a democratic community. But its relations to the divisions of the one great church are on the whole remote. For *cisms* it has not only contempt, but also indifference; for heresy, while it may give approval to the motives of the heretic, it has only indifference. The little truths which one endeavors to correlate and to transmute into the system of orthodoxy usually seem to it slight and unimportant. The larger, therefore, a university becomes, the less significant do its denominational and sectarian relations appear. A sectarian university is a misnomer. The larger and stronger a university becomes, the more impressive and stronger becomes its allegiance to the fundamental doctrines of religion. For these are fundamental truths of being. A sectarian university would be a practical impossibility, as an irreligious university is a logical inconsistency. These truths receive illustration in the changes which have occurred in the universities of every order, and also in the enlarging policy of the oldest colleges of America.

It is also to be noted that theology, studied broadly, as it ever should be, becomes, when studied subjectively, psychology, and when studied objectively it becomes either anthropology or biology. Such a broad study of theology the university is, of all institutions and agencies, the best fitted to conduct. The school of theology is in peril of being a school of theology only. The results of such a narrow method cannot but be slight. For, valuing at the utmost the content of all special revelations from and concerning the Divine Being, these revelations are so slight in comparison to the whole content of truth respecting God and his will that advantage must be taken of psychology and anthropology and biology for learning whatever can be known touching Him who is all and in all.

In the promotion of social efficiency the university adjusts itself in best ways to the growth of that ever-growing force, the sense of humanity. It is significant that the growth of the sense of humanity has been specially vigorous in the forty years that have elapsed since the publication of *The Origin of the Species*. As it has become evident that man has arisen out of the lower forms of life, the worth of humanity, the highest form, has been more appreciated, and the sense of the oneness of this present highest form been the more clearly harmonized. This problem of recognition and appreciation the university is set to promote. It has been and is an agency and a condition best fitted and qualified to promote the growth of this sense of humanity. Thru the interpretation of human movements, and thru a sense of love for all men and a

desire to serve all men; the university most directly ministers to the noblest growth of the noblest humanity.

The university also performs an important function toward that element of society known as public opinion. Public opinion is the special product of democracy. It arises from the freedom of the body democratic to express its thoughts, and it reacts on the people and helps to create and maintain a democracy. The university is the voice of the people. It is at times the voice of God, and it has sometimes, in a free democracy, an authority greater than that of God. Public opinion, in a democracy, is usually tyrannical, and those over whom it rules are commonly its willing subjects. It is the tyranny of the majority, and it is hard to find a tyranny more tyrannical than the tyranny of the majority. It is the power of a tyrant raised to the *n*th degree. To public opinion the university owes three duties: first, it should give enlightenment, in order that public opinion may be rightly formed; second, it should teach the right of dissent; and third, it should teach and give an example of fairness and moderation.

Concerning all these elements truth is to be the basis. Absolute freedom in the teaching is to be allowed, and even to be required. The judge of what is allowed and what is the truth is not to be the civil nor, of course, the ecclesiastical power, but the university itself. The university is of all bodies the best qualified to be the judge. It has no political government to conserve or to perpetuate; it has no doctrine to impress; it has no purpose to perform, excepting the discovery of the truthfulness of the truth, as a means of human betterment. The great progress of the universities of Germany in this century has been caused more by the freedom of the teaching than by any other condition, and upon whatever occasions the civil authorities have seen fit to interfere with the freedom of the teaching, these occasions have resulted, not only in harm to the universities, but also in injury to the best interests of the people. In this country the interference with freedom of teaching has been far less frequent than is commonly supposed. Professors have been removed from their chairs, and the public has often believed that the reason for the removal lay in the unwillingness of the professors to submit their judgments to the judgments of founders or trustees or benefactors. I, for one, would not say that in some American universities the freedom of teaching is not so great as it ought to be. I would not say that chairs have not been declared vacant on the ground that their occupants presented opinions which did not have the approval of boards of trustees; but I do say that such instances are far less common than is usually believed. The reasons for the removal of professors have often been reasons of personal character or of general inefficiency—reasons of which the public knows nothing at all. Such reasons are far more frequent than reasons arising from a lack of freedom in teaching. In fact,

I should not hesitate to say that freedom of teaching has seldom been absolutely interfered with by the governing authorities.

The prosperous democracy of the United States is engaged, together with Germany, Great Britain, France, and Holland, in the industrial conquest of the world. The period of settlement of the newer parts of the world has been succeeded by the period of commerce, and the period of commerce is to be succeeded by the period of industrialism. The development of mines, the building of railroads, the organizing of vast agricultural conditions and forces, the formation of great steamship lines, the equipment of mills for the manufacture of iron and steel and lumber, and for the products of iron and steel and lumber, represent some of the chief forms which industrialism is to assume. This industrialism is to touch Africa, South America, Asia Minor, and China. It is to touch ultimately every part of the world, parts as remote as Thibet, Persia, and Afghanistan. To this vast, and to become yet more vast, industrial movement the university bears several relations. First, the initiative and the progress of these movements demand (*a*) a trained brain, to see, to foresee, and to judge; and (*b*) a will strong for decision and strong also for carrying decisions into effect. The university does not primarily train the will, but the university does primarily train the mind, of which the brain is at once the expression and the agent. Therefore the university should be able to offer to those concerned in the vast undertaking a higher order of talent than can elsewhere be found. Secondly, the university also should not only be able to furnish great administrators, it should also be able to point out the most effective methods by which these undertakings can proceed, and the most favorable conditions under which these undertakings can be made to achieve their highest purposes. A generally trained intelligence is the best method and condition for securing these great results. It is, for example, a generally trained intelligence which has worked so silently and so unconsciously as to seem to be almost the working of the time-spirit, which has proved that iron and steel can be most economically made on the southern shore of Lake Erie. It is the lack of a generally trained intelligence that has tried to make iron and steel in certain other remote parts. Wisdom touching all the conditions of great movements should represent the result of the training given to university men. Thirdly, the university, moreover, should not neglect to point out the perils which lie in the pathways of these undertakings, both for the people and for the governments which foster these vast movements. The voice of the university, free from partisanship, free from any suspicion of a taint of a narrow patriotism, seeking to learn the truth, trying to do those acts of righteousness which are based on truth, should be the most potent and persuasive voice in determining the course of the industrial conquests of the world. The only fear is that, tho the voice speak, it may not be heard, or its intimations followed, or its admonitions heeded.

In point of intellectual condition, the higher classes in a prosperous democracy are subject to the temptation of materialism and sensualism; the middle classes, to the temptation of mediocrity and commonplaceness; and the lower classes, to the temptation of brutalism and contempt of all knowledge. In point of manners and social condition, the higher classes are open to the temptation of arrogance, the middle classes are open to the temptation of pettiness, and the lower classes to the temptation of bestiality. To each of these classes the university owes a special duty. To the higher it owes the duty of teaching spirituality; to the middle, the duty of teaching the relativity of the values of knowledge and of the truths of personality and of things; and to the lower, the duty of teaching gentleness and humility. American scholarship, thru its ministry in the universities, thru its teachings and its teachers, is to remove evil, instruct the ignorant, humanize the brutal, uplift the sensual, broaden the narrow, enrich the poor, elevate the low, make natural the unnatural, and the human divine.

FEDERAL AND STATE INTEREST IN HIGHER EDUCATION

ROBERT B. FULTON, CHANCELLOR OF UNIVERSITY OF MISSISSIPPI

The history of state and federal aid to education in the United States shows the first colonists within our borders, the fathers of the republic, as well as all later statesmen who have been leaders in national or in state affairs, ever recognizing the imperative necessity of an all-embracing and thoro education for the people in order to preserve our institutions and perpetuate their blessings. From the beginning of our history, to aid and encourage schools and all the means for education and the dissemination of knowledge has been accepted as one of the proper functions of government, and a most beneficent mode of state and national activity.

In the New England and northern states, colonial and state aid and fostering care, as well as individual effort, early gave development to common schools, and even the higher institutions of learning in these states owe their foundation and success largely to colonial or state interest. In the more southern of the original states, Virginia, the Carolinas, and Georgia, colleges and universities founded and maintained by the state preceded, in order of development, the common schools. From the first it has been everywhere recognized that both common schools and higher seminaries of learning, in whatever order established, are complementary parts of a properly ordered educational system in any state. The special forms and details which differentiate the systems of public education in the eastern states, in the western public-land states where rich provision was early made for schools of every

grade, in the southern states where sparse population and the co-existence of two races made peculiar difficulties, have been determined by the past experience and present resources of each section.

In twenty-nine of the newer states of the union, including all the states lying west of the Alleghany mountains, excepting West Virginia, Tennessee, Kentucky, and Texas, a special and definite shape was given to educational policy thru the legislation made by Congress in the organization of these states. This legislation, as shown in the ordinances relating to the disposition of the western territory adopted by Congress, May 20, 1785, July 13, 1787, and July 23, 1787, was the logical result of the sentiment which had prevailed in most of the colonies from the beginning, and which found definite and forcible expression in that clause in the ordinance of July 13, 1787, which declares, in language which has long been classic thruout the Northwest, that, "religion, morality, and knowledge being necessary to good government and the happiness of mankind, schools and the means of education shall forever be encouraged." Following the spirit of this ordinance, Congress inaugurated the policy of reserving from sale, and of granting to the states formed out of the public domain, portions of the public land for the maintenance of common schools, and for seminaries of learning or state universities.

At the first was adopted the policy of granting to the inhabitants of each township (act of April 30, 1802), or to the state in which the township was situated (act of June 23, 1836), section 16 in each township for the use of common schools, the amount granted to each state being thus one thirty-sixth part of the public domain in the state. Grants for the maintenance of common schools have thus in all cases been proportionate to the areas of the several states. The states admitted since 1848, being those which occupy almost exactly the western half of the United States (exclusive of Texas, which is not a public-land state), have received a double portion, or one-eighteenth part of the public lands in each, for the support of common schools.

Grants made to the states for seminaries of learning or state universities have their origin in the action taken by Congress July 23, 1787. The earliest acts of Congress in reference to these grants indicate some uncertainty as to the quantity of land that would be given to each state for a state university. In Ohio actually three townships were given. Upon the admission of Indiana and other states at least two townships have been given, and several states have received four townships of land for founding in each a state university. The total amount of land granted for common schools in the public-land states is 68,000,000 acres, and the total granted for state universities is 1,618,000 acres.

Another and distinct class of grants had its beginning in the act of July 2, 1862, "donating public lands to the several states and territories which may provide colleges for the benefit of agriculture and the

mechanic arts." Under this act lands have been granted to all states and territories of the union at the rate of 30,000 acres for each senator and representative in Congress to which the states were respectively entitled by the apportionment under the census of 1860, and a total of 10,410,000 acres thus passed to the states and territories, not counting the undetermined amount which will go to Oklahoma.

The act of August 20, 1890, makes a further grant to each of the states and territories for the maintenance of schools of agriculture and the mechanic arts out of funds arising from the sales of public lands. This grant now gives \$25,000 per annum to each state. Besides the grants of lands to the several states as trustees for the maintenance of common schools, of state universities, and colleges of agriculture and the mechanic arts, small portions of the public lands have occasionally been donated to certain institutions of learning, the total of acres thus given being less than 300,000.

While Congress has for more than a century thus shown a willingness to meet in some way the need, as well as to make provision for the future, of education in the states, it should be noted that federal aid has regularly been given in the form of grants of public land, or of the proceeds of the sales of public land. Efforts to secure from Congress the appropriation of funds raised by taxation to educational uses have thus far uniformly failed. The Blair Bill, proposing to distribute annually from seven to fifteen millions of dollars to aid common schools in the states, the share of each state to be proportionate to the number of illiterates, attracted wide attention in 1883 and 1884, but found its most formidable obstacle in the disinclination of members of Congress to use for the education of the people funds raised by federal taxation. Efforts to found a national university in Washington have developed the same obstacle.

The several states, in accepting the grants of land made by Congress and in the inauguration of state systems, have assumed obligations for common schools and for higher education which each is discharging as best it can. But are the several states fully meeting—are they all fully able to meet—the needs of the hour and of the dawning century for this work? The states of the South which are feeling the weight of the white man's burden cannot give a satisfying answer.

One who solves educational problems is continually finding unexpected results. While Mr. Jefferson and educationists since his day have discussed the order in which educational institutions should be developed, and the relative importance to the state and to our political institutions of schools of lower grade and schools of the highest rank, the experience of the American people is working out thru their agencies for education, more rapidly than is generally known, a realization of the best hopes and dreams of these thinkers.

In the year 1818 Mr. Jefferson said, in reference to his own state of Virginia, in which his educational doctrine was new and not popular :

A system of general instruction which shall reach every description of our people, from the richest to the poorest, as it was the earliest, so it will be the latest, of all the public concerns in which I shall permit myself to take an interest.

Again in 1823, when he had been unsuccessfully laboring to establish in Virginia a system that should include schools of all grades, he writes :

Were it necessary to give up either the primaries or the university, I would rather abandon the last, because it is safer to have a whole people respectably enlightened than a few in a high state of science and the many in ignorance.

It was his hope that the common schools, reaching every hamlet, would not only disseminate knowledge, but would incidentally discover what he called "the youths of best genius," and stimulate them to seek higher development. But even the keen foresight of Mr. Jefferson failed to note all that was potential in the system which he advocated. The power of the common schools and of the common-school teacher to discover "youths of best genius," and to stimulate these to high and noble endeavor, even his far-reaching eye did not fully see. The simple statistics of the closing years of the nineteenth century teach a lesson of glorious achievement, and one that points to even richer realization in the future.

From 1890 to 1900 the total population of the United States increased from 68,000,000 to 76,000,000, at a rate of about 10 per cent. in ten years. The enrollment of pupils in common schools increased during a period nearly coincident with this, from 1890 to 1899, from 9,500,000 to 11,500,000, at a rate of about 23 per cent.

The reports of the Commissioner of Education show that in 1894 there were 133,000 students attending universities and colleges, and in 1900 the same reports show 158,000 students in colleges and universities of every kind thruout the United States. There is here exhibited an increase of about 19 per cent. in such attendance within seven years.

But what do the statistics of the state universities show for the same period? In the year 1894 the attendance of students in twenty-six state universities, including all sections of the union except the North Atlantic states, shows an aggregate of 14,943. The same twenty-six institutions in 1901 show a total enrollment of 29,583—an increase in attendance of over 100 per cent. in seven years. There is no mistaking the significance of these figures. The vigorous and timely work of the National Educational Association thru its Committee of Ten, and its other committees, and the discussions in its meetings, have brought about a clearer understanding of the relations of schools of all grades. Teachers and instructors have been informed as to what American education stands for. Co-ordination, and, what is better, co-operation, have become facts.

While the last seven years have thus shown a marvelous growth in the

work for higher education done by state universities, and thus in a way has been shown the special fitness of these institutions for their work, yet these institutions have received scant share of the many millions of dollars with which private beneficence has aided higher education in America in recent years. Fortunately wise statesmanship has brought in large measure the needed support.

Undoubtedly all the signs indicate that the question which will most employ the administrators of these state universities during the next ten years will be that of making suitable provision for the increased demands upon these institutions created by the increasing numbers in attendance.

The most expensive instruction offered in the state universities is that afforded in the graduate courses and in engineering courses. By making proper provision for graduate work in a national university located in the capital, to which may be admitted only those who have completed satisfactory courses in the state universities and the colleges of the country, at once two valuable results would be accomplished: a stimulus to more thoro undergraduate educational work would be given in every worthy college, and the burden of the maintenance of graduate courses will be largely lifted from the institutions financially and otherwise unable to bear it. Every state university and every state college does not need to be, and cannot be, effectively a graduate school.

Let Congress aid the engineering work which is undertaken in the state universities by the enactment of some measure in accordance with precedent, such as that which has been proposed for giving to the several states means for maintaining schools of mines, or of engineering in other forms. The federal aid thus suggested can be applied and should be applied in such way as not to disturb good work already being efficiently done in the several states, but so as to give the co-ordination and concentration which would mean the highest efficiency and the largest usefulness.

State interest in higher education is not yet adequate, financially, to fully meet the requirements within the borders of every state for the more advanced and more specialized forms of education. The wise foresight of the founders of the republic made thru federal agency some special provision for these by grants of public lands to the states. The fact that the last seven years of the nineteenth century show an increase of 100 per cent. in the students seeking what is highest and best in state universities proclaims an emergency of national importance, and one whose requirements can be met only by a larger and more liberal co-operation between federal and state and all other interests in the development and maintenance of that higher education which the national life in the present century demands.

*RECENT GROWTH OF PUBLIC HIGH SCHOOLS IN THE
UNITED STATES AS AFFECTING THE ATTENDANCE
OF COLLEGES*

W. T. HARRIS, UNITED STATES COMMISSIONER OF EDUCATION,
WASHINGTON, D. C.

It is a matter of rejoicing with us to remember from year to year that 21 per cent. of all our inhabitants attend some public school supported by the taxes of the state or municipality. We are pleased to know that, besides this large attendance on public schools, there is a still further attendance on private schools to the amount of 2 per cent. of the entire population.

On the average one person in every four gets into a school of some sort in the course of the year. It is true that not all of these obtain a full 200 days of instruction. In fact, the average length of the school term for the whole country last year was only 145 days; and it had been growing pretty constantly for nearly 40 years, thanks to the increasing number of cities and villages in our land; for only 10 years ago the average school term was 10 days less than now—20 years ago it was 15 days less, or only 130 days in the year. But the school population did not attend quite 70 days in the hundred. They did not attend the 145 days that schools were in session, which was the highest possible number, but only 99 days on an average.

Taking this fact of average attendance into consideration, we may say that seventeen and a quarter millions of our people attended school the past year an average of 99 days each. Short as the school term is now, we like to record the fact that it has increased in the course of 30 years exactly 20 days, for the actual average attendance was only 79 days in 1870, while there is, as we have seen, 99 days' attendance now.

We who know what the school means to the people therefore rejoice when we recount to ourselves these facts of statistics, and feel sure that, no matter how poor the schools may be, nearly our whole population is learning how to read, and coming under the influence of the newspaper, the magazine, and the book. We know that the person who can read a little will, in most cases, be put to the exercise of his accomplishment, and that he will be likely to read better at the end of a year after he has left school. In the city he will have constantly to spell out the names on signs, the names of streets, and the words on milk wagons, ice wagons, and all kinds of delivery wagons. He will pick up the daily newspaper thrown away by someone, and become interested in spelling out the inscriptions over or under the pictures, even if he does not go so far as to invest a cent for a copy of the paper on his own account. We know that the person who has learned to read a little in ever so short a school term has entered on a career of education that will, in all likelihood, make him better acquainted with books from year to year as long as he lives.

Much as we are pleased with the contemplation of the vast army of school children marshaled each year into the elementary school, there is another phase of our statistics which really gives us greater cause for rejoicing, and I wish briefly to go over with you some of the statistics relating to secondary and higher education; for, while there is progress in securing a longer school year and an increased number of days in actual attendance in the elementary school, there is a far greater ratio of increase in the numbers that continue their studies beyond the eight years' work of the district school and enter the public high school, or the private academy, and this great increase in secondary education has furnished its quota of population prepared to enter college. The first aspect of this increase in secondary pupils is the opening of new high schools. It would seem as tho the whole population of the country, in all its sections, North, South, East, and West, had resolved to have free high-school instruction for its children, for in the past ten years—and three years (1895, 1896, and 1897) were years of financial disaster—there was an increase in the total number of high schools from 2,526 in 1890 to 6,005 in 1900.

The number of high schools in the United States in 1860 was about forty. At that time wise people shook their heads and said: "It is doubtful if the constitution permits the education of the people in free high schools. District schools may be all right enough, but our forefathers never intended to furnish a liberal education to all children at the expense of the taxpayers." The friends of free high schools were somewhat uneasy over this. But the next ten years saw the number of high schools rise to four times their former number—the 40 of 1860 had increased to at least 160 in 1870; and in the next ten years the increase continued, so that by 1880 there were in operation nearly 800 public high schools. These, as we have seen, reached 2,526 in 1890, and 6,005 in 1900.

The most noteworthy circumstance connected with this is that the increase of public high schools has gone on in all sections of the country. Take, for example, the North Atlantic states; these already had 786 high schools in 1890, and they came near to doubling their quota in 1900, in which year they reported 1,448. The South Atlantic states had only 115 high schools in 1890, but in ten years they had in operation nearly four times as many, for they report 449 in 1900. The South Central states did even better than this, for they increased their public high schools from 158 to 675. The Western division of states—including those on the Pacific coast and states in the mountains—had 91 high schools in 1890, but 270 in 1900. The North Central states have long led in the number of public secondary schools. They had in 1890 more than half of all the high schools in the country, and they have more than half now. Their quota increased from 1,376 to 3,163 public high schools.

Even the schools in the South for colored people have a considerable

number of secondary pupils. In 1880, while the population of the entire country sent 4,362 in each million into public and private secondary schools and colleges, the states of the South (including Missouri) had 1,289 colored students in each million of colored people. Altho this was less than one-third of the average quota, yet it was encouraging because it showed that much was being done to furnish an educated ministry, qualified teachers and physicians. The quota in a million of colored persons in high schools and colleges has increased slightly from decade to decade, owing chiefly, it would seem, to the increase in colored high schools in southern cities. The quota in the million was, as I have mentioned, 1,289 in 1880. It rose to 2,061 in 1890, and to 2,517 in 1900—quite a noteworthy increase of itself, altho eclipsed by the general increase for the entire country. In these statistics of colored people I have included both secondary and higher education, because it is not easy to tell how large a proportion of those enrolled in colleges are up to a college standard, and how many are only advanced to the secondary rank. I have also counted together the public and private schools for secondary and higher work.

We all know that an increase in the number of schools does not always mean an increase in the number of pupils. I must add to our survey of the increase of high schools the data in regard to pupils. And it is gratifying to know that, on the whole, the increase in secondary pupils in high schools has been much greater than the increase in the number of separate schools. The whole United States enrolled in round numbers 203,000 high-school pupils in 1890, and 520,000 in 1900. But it will be asked: Has not this increase in high-school enrollment been at the expense of the private academies and preparatory schools? The answer is that the private secondary schools have increased in the whole country from 1,632 institutions in 1890 to 1,978 institutions in 1900, and that their students enrolled have increased from an aggregate of 94,931 to 110,797—an increase of 16 per cent. This increase is pretty evenly divided in the sections of the country, excepting the Western division which shows a large falling off in private secondary schools, the new public high schools apparently drawing 5,000 students in their 22,000 increase from the private schools. This is a trifling item in the grand total.

If we compare the private secondary schools with public high schools by quotas in each million of population, we discover that the private enrollment has not increased quite as fast as the census population. In 1890 each million of inhabitants enrolled 1,516 pupils in private academies, but only 1,443 in 1900—that is to say, 73 less in the million. But the public high schools enrolled in 1890 3,241 pupils, while the private high schools enrolled 1,516; and in 1900 they enrolled 6,832, where the private high schools or academies enrolled only 1,443.

The number of students in the principal studies may be seen in the following tables:

STUDENTS IN CERTAIN STUDIES IN PUBLIC HIGH SCHOOLS IN 1890 AND IN 1900

	1889-90		1899-1900	
	Students in	Per cent. of total secondary students	Students in	Per cent. of total secondary students
Latin.....	70,411	34.69	262,767	50.61
Greek.....	6,802	3.05	14,813	2.85
French.....	11,858	5.84	40,395	7.78
German.....	21,338	10.51	74,408	14.33
Algebra.....	92,150	45.40	292,287	56.29
Geometry.....	43,294	21.33	142,235	27.39
Physics.....	46,184	22.21	98,846	19.04
General history.....	55,427	27.31	198,125	38.16

STUDENTS IN CERTAIN STUDIES IN PRIVATE HIGH SCHOOLS AND ACADEMIES

	1889-90		1889-1900	
	Students in	Per cent. of total secondary students	Students in	Per cent. of total secondary students
Latin.....	29,733	31.32	52,089	46.92
Greek.....	6,667	7.02	10,056	9.77
French.....	16,174	17.03	25,289	22.83
German.....	12,870	13.55	20,465	18.47
Algebra.....	35,247	37.12	54,726	49.40
Geometry.....	16,487	17.36	26,283	23.72
Physics.....	17,460	18.39	20,090	18.87
General history.....	27,482	28.98	40,009	36.11

Thus far I have mentioned only the secondary students in the public high schools and in the private academies, the same forming an aggregate of 297,895 in 1890 and of 630,048 in 1900. Besides these, there are students of secondary grade in very many normal schools and colleges enrolled as preparatory classes, and also in many institutions of special character, such as manual-training schools and schools for arts and sciences under various names. These numbered in 1890 as many as 69,109 students, and in 1900 had increased to 89,193, or more than 20,000 more. They are at present increasing somewhat more rapidly, thru the attempts of cities to provide technical and commercial instruction for their people. These special secondary students numbered 1,115 in the million of inhabitants in 1890, and 1,174 in 1900. Adding them to regular secondaries, public and private, the total of secondary students in each million of inhabitants in 1890 was 5,872, and in 1900 had risen to 9,449, the same being an increase of 3,577 students for each group of a million people. This vast increase of secondary students has had an effect upon the attendance on colleges and universities, and upon professional and technological schools. For the record of progress in higher education is similar to that in secondary, namely, an unexampled increase. In 1872 there were 590 college students in the million of population. In 1890 the 590 had increased to 880, and in 1900 to 1,284.

The number in the professions has increased rapidly. There were

of these 280 in the million of inhabitants in 1872; in 1890 they had increased to 450, and in the past decade they have nearly doubled. Scientific and technical schools of college rank have increased their enrollments in the decade from under 15,000 to about 30,000.

The growth of post-graduate work in universities has been still more remarkable. Beginning with 198 in 1872, it had increased to 1,717 students in 1890, and to 6,000 in 1900.

Reducing the returns for higher education of all kinds to groups of a million, we find that there were 2,181 students of college rank to the million of inhabitants in 1890, and that the quota had risen to 3,139 students in 1900. In this estimate I include not only the colleges and universities of full standard, but also very many others not quite up to the standard, but which are empowered to confer the degree of A.B. on their graduates, and which are really beyond average secondary schools in their amount of work. Besides these, there are also professional schools of a special character which require maturity of age and which do work that requires more reflection than the average secondary work. The normal schools are an example of this class of schools whose students are counted in the aggregate of higher education.

If we add the totals of higher education to those of secondary schools, in order to see what the country as a whole is doing in schools beyond the elementary grade, we find that in 1890 there were 8,053 students in the million of population, who were pursuing advanced studies, and that these 8,053 had increased in the decade to 12,588.

ENROLLMENT OF SECONDARY PUPILS
Ninth to twelfth year of course of study in the United States

	1890	1900	In each million of population	
			1890	1900
Private academies.....	94,931	110,727	1,576	1,443
Public high schools.....	203,000	520,000	3,241	6,832
Preparatory classes and special institutions.....	69,109	89,193	1,115	1,174
Total secondary pupils.....	367,040	719,920	5,872	9,449

TOTAL HIGHER EDUCATION IN THE UNITED STATES

	1890	1900	In each million of population	
			1890	1900
Colleges.....			800	1,284
Other higher education, professional and technical.....			1,301	1,855
Total higher.....			2,181	3,139
Grand total secondary and higher.....			8,053	12,588

The significance of these educational items cannot be fully appreciated without considering the facts that I have hinted already, namely, that the

school gives the power to continue one's education with increasing skill thruout life. Even the illiterate grows, altho slowly, in mental power by reason of his experience in life. But his experience is limited to what he can observe in himself and in a small circle of neighbors. But his school-educated companion who can read and does read is all the time widening his mental view by what he gets from the printed page, and growing in accuracy of thought on account of it. Hence it happens, after fifty years of life, at the age of sixty years, the illiterate has grown as much by experience as he could grow by one year of schooling, while his literate companion has grown at least ten times as much.

So with the secondary pupil there are opened new windows out of which to observe man and nature—the windows of algebra and geometry, of physics and chemistry, of Latin and French or German, and of general history. He gets at least three times as much from the printed page of science or literature as the graduate of the elementary school, and his accumulation in the course of fifty years is more than ten times that of his elementary companion or one hundred times that of the illiterate.

In one year's time the high-school graduate has not made very many applications of his knowledge, but, as the years go on, he starts new trends of observation, and follows out threads of causation and long paths of genesis in the growth of the things and events that come under his immediate observation.

The student of higher education far surpasses the secondary student in his ability to see lines of causality and of genesis in facts and events, and his power to accumulate in his life experience from year to year is far greater. His power to see the past in the present and to predict the future at a glance of the present situation seems miraculous, after fifty years of using his higher education. Just as Agassiz could see in the scale of a fish enough of its character to enable him to draw the fish, altho he had not yet seen the fish, and just as Asa Gray could divine the history of a tree from seeing it at a single glance, so in a thousand ways and in a thousand different provinces the old man who in youth has been trained in the college and in the professional school acquires powers of seeing things in their history and in their complex of relations.

These are the considerations that make us rejoice at the recent unexampled increase of secondary and higher education, and it remains for us to say that this increase is likely to go on, because it is due to the growth of productive industry in the country. The use of water, steam, and electricity in the industries is increasing the average annual production of each inhabitant. This accumulation of wealth enables our people to prepare their children in better schools and in longer periods of schooling.

The average school term of the United States is only five years of two hundred days each, or one thousand days. The future will see this lengthened with the increase of wealth in the community. I do not think

that the average production of wealth in 1800 could have been more than ten cents a day for each man, woman, and child, but by 1850 it had risen to thirty cents a day, and in 1880 to forty-four cents; in 1890 to fifty-two cents. What it was in 1900 can be told when the census is completed. The average amount of schooling will increase to ten years and more when, at some time in the future, we can produce a dollar a day for each inhabitant.

Wealth is a good thing only because it enables us to grow wise and good — only as we use it to develop insight in ourselves and become more helpful to our fellow-men. It therefore is a cause of rejoicing to us this morning to see that, with the increase of wealth production in the United States, there is an immediate application of the wealth to get more schooling for the people. Where an average town of two thousand inhabitants could have sixteen youths in school engaged on advanced studies ten years ago, today it has twenty-five such.

This is what it means to build new high schools and to increase the facilities for higher education.

DISCUSSION

JAMES RUSSELL PARSONS, JR., secretary of the University of the State of New York, Albany, N. Y.—The rapid increase of public high schools thruout the United States is often cited as a most conspicuous fact in education at the close of the nineteenth century. Dr. Harris tells us that, for purposes of comparison, the secondary-school statistics of the Bureau of Education since 1890 are more reliable in fixing the proper limits of this growth than those of an earlier period, as the distinction between elementary and secondary students has been more closely observed from that date. He says that during this period the number of high schools reported to the bureau has increased 137.73 per cent. and the number of high-school students 155.84 per cent., while the growth in private secondary schools and students has been only 21.2 per cent. and 16.71 per cent. respectively. These figures show an increase of 111 per cent. in students in both classes of schools taken together. We notice that the greatest growth is reported in the South Central division, where there is also an increase of 42.67 per cent. in private secondary-school students. Next comes the Western division, where the growth is partially counter-balanced by a decrease of 45.91 per cent. in private secondary-school students. The South Atlantic division makes the next highest record, and reports also an increase of 25.03 per cent. in private secondary-school students.

Within the jurisdiction of the University of the State of New York exact statistics of a corresponding growth are available thru sworn reports from each secondary school, verified by inspectors whose duty it is to examine each of these schools in person. Elementary pupils are rigidly excluded, and only those are classed as secondary-school students who have completed a satisfactory elementary course and are enrolled as pursuing secondary studies. While the growth in enrollment in the common schools has been only 16 per cent. in ten years, the number of public high schools has increased 140 per cent., the number of academies 34 per cent., the total net property of secondary schools and the number of secondary students more than 100 per cent. At least 25 per cent. of these secondary-school students now complete balanced four-year courses after an eight-year elementary course, and rapidly increasing numbers remain in secondary schools for graduate work. The distribution of these schools is so general that almost every student in the state is now within reach of one of them.

How has the recent growth of secondary schools, especially public high schools,

affected the attendance on institutions of higher education? As compared with 1880, we now have in the United States more than twice as many professional and technical schools, not including the training schools for nurses and other special institutions. Dr. Harris tells us that the enrollment in our colleges and universities shows a corresponding increase since 1870. Including all under secondary instruction in the various kinds of institutions reporting to the Bureau of Education, the numbers have nearly doubled in ten years, and the growth in those under higher instruction has not lagged far behind. Far more than new institutions of higher education, we now need increased facilities and larger endowments for those already established.

In New York also the growth in ten years in higher, including professional and technical, education has been almost as remarkable as that in secondary education. The students and the total net property have nearly doubled. The growth of public high schools is not surprising in view of the popularity of these democratic institutions and of the fact that advancing requirements for professional and other degrees, now more uniformly high than in any other political division of the United States, force students into the high schools to gain the preliminary education necessary for admission to degree-conferring institutions. The statutes now require a high-school training, or its equivalent, for admission to certain professions. By a rule of the court of appeals, no student is entitled to the allowance of one year in the term of study for admission to the bar who is not a graduate of an institution requiring at least six years in arts or science in advance of a completed eight-years' elementary course. The work must be registered by the regents, whose ordinances prescribe for degrees in arts or science two years' study in advance of this minimum standard. It is remarkable that, under such conditions, the growth in higher education has been so great. If we except medicine, where the normal increase was checked temporarily by high standards, and some of the smaller colleges, which, as private institutions, like the old academies, suffer thru competition with the public high schools, the growth is very great thru the entire field of higher education.

In 1900 the cost of education in New York was more than \$47,000,000, of which the state paid 16.37 per cent. for elementary education and allied interests, 6.03 per cent. for secondary education, and 1.16 per cent. for higher education. The appreciation of the secondary-school system on the part of the people is shown by their willingness to contribute 94 per cent. of the cost of its maintenance. As we look deeper still and study the wonderful growth in expenditures for higher education, of which the state bears only 1.16 per cent., we see that private means are much more freely expended for education than funds raised by taxation.

It is clear that trained minds must be had at any cost, that the extent to which public and private means unite in producing them will continue to increase even in periods of comparative financial depression, and that growth in secondary education will mean in the future, as at present, a corresponding increase in enrollment in our institutions of higher education.

THE RELATION OF MUSIC TO LIFE¹

THOMAS WHITNEY SURETTE, STAFF LECTURER ON MUSIC FOR THE AMERICAN UNIVERSITY EXTENSION SOCIETY OF PHILADELPHIA AND LECTURER FOR THE UNIVERSITY OF THE STATE OF NEW YORK

It is a commonplace of criticism to say that art is related to life; that painting, sculpture, architecture, and music, as well as literature, reflect

¹ The illustrative interpretations to Mr. Surette's paper were as follows: Haydn, Adagio from Trio in G; Beethoven, Scherzo and Andante from Trio in B flat, Op. 97; Brahms, Adagio from Sonata for Violin and Piano in G minor: piano, Mr. Surette; violin, Miss Anna Otten, of New York; violoncello, Mr. H. Andries, of Detroit.

life at every point. Every change which has taken place in the art of painting, for example, has been due to the rise of some new idea or new phase of life. The old Italian religious painters lived at a time when the chief end of existence was to get successfully out of this world and safely into the other; as a result all their paintings deal with religious ideas and symbols. The rise of landscape painting did not begin—could not begin—until men had come to love nature in all her simplicity, as we have learned to. Look at the landscape painting of the time of Botticelli, and you will see the force of this argument. Gothic architecture was not an accident by any means; its rise was a natural result of new intellectual and religious aspirations, and it stands for something entirely distinct from the old ideals of the earlier time. The romantic school of the early nineteenth century, the realistic school of the later, Heine's poetry, Victor Hugo's novels—all these reflect, or, shall we say, give voice to, the new ideas which were crowding for utterance during those times.

Each of the arts had to find itself; had to build up somehow a framework; had to conform to the laws of life which bind all things and persons. Architecture learned how to use these laws to the best advantage in construction; painting learned foreshortening, perspective, and the like; the novel planned itself from the happenings of every day. They all finally evolved a plan by which it was possible to express what they had to say.

Music was long in finding itself; it developed late; it had to feel its way slowly, not being able, as the other arts were, to copy nature for a beginning, but learning the laws that govern it step by step, so that it is only now on the threshold of its development. But at every point of that development may be traced unerringly the relation it bears to life. Every change in civilization which has occurred since the art of music has been full-fledged has found expression in this most plastic of the arts, and it is not too much to say that the relationship between music and life is absolute and complete.

Complete, yes; but not easy of apprehension. A painting, a piece of sculpture, a building, speak a language we can, in a measure, understand; but a symphony not only speaks an unknown tongue, but an illusive one; its words and sentences lie unrelated in our minds, and are quickly brushed away by others equally illusive.

It is my purpose, then, to take three periods in history familiar enough to all of you, and by means of three great compositions coming out of those times to show the close relationship between them and the life which produced them, and then to consider the more important question of their real significance: What do they amount to? What does music amount to, as a factor in life?

The first of these periods is the time we sometimes speak of as the "old régime;" before the dawn of republicanism, when powdered wigs

were fashionable; when formality and decorum were of more importance than morals; the time of class distinctions, when a man's fortune hung on the smile of a grandee. I have taken for my illustrative music a composition by Haydn—the slow movement of the trio for violin, violoncello, and piano in G. This exquisite miniature of a piece has in it all the repose and elegance of that time. Clear in harmony, ornate and graceful in melody, it aims to charm rather than to astonish; at every pause it bows formally with its reiterated chords; every line of it rhymes like a nice bit of old-fashioned verse; it is for all the world like the pictures we used to see in Godey's *Lady's Book*. Its feeling is restrained; its sentiment is tempered by propriety; it neither makes you laugh nor cry; it has an old-fashioned sweetness which is always refreshing. Some of its characteristics are due to the fact that at the time it was written the nature of the violoncello was not thoroly understood and its technique was limited, and that the piano was a very inadequate instrument indeed. Here you see the hampering effect of the undeveloped mechanical side of the art. The tools were not perfect, so the work itself had to suffer. The 'cello part in this trio is made up largely of unimportant notes without any real significance, and the piano drums along in the style of the pieces we all used to play an hour a day (with one eye on the clock) when we were children.

So, leaving the question of its significance for later discussion, we may, at least, say that this lovely adagio of Haydn's is characteristic of the time it comes to us from, and, considering the medium it has to speak thru, expresses the spirit of that time most graphically.

The second period I have chosen is at the beginning of the nineteenth century. America had just won her independence and flung out her flag to the winds with the motto: "All men are born free and equal." France had shambled thru her bloody time and was trying to hold up the same motto, with sad results; in Germany even there were not lacking signs of coming changes, and everywhere in the air men breathed there was something to make the weakest hope for justice. "All the ills which afflict humanity arise from vicious artificial arrangements, such as the church and state," cries Rousseau; "away with formality and class distinction; wear the citizen's dress; man is something more than what his tailor makes him; a prince is but a man; we are all alike in God's sight;" and so on. Out of all this there must spring new art. The well-rounded periods of Haydn's music will fail to speak this language; we want now greater sincerity; yes, sincerity even to the pitch of brutality. We must say what we mean, exactly; no more bowing and smirking. And a man came to speak this message, and he spoke in no uncertain voice. Had Carlyle taken one more type for his *Heroes and Hero-Worship*, he might well have chosen the hero as composer, and have taken Beethoven as the model. Here was a man of the true hero mold;

spurning the conventionalities and formalities of life ; caring only for the realities ; absolutely sincere in his motives and facing bravely a fearful personal catastrophe in his deafness, he well may be placed among those who have fought a good fight and died that we might live. "A great man has the planet for his pedestal," says Emerson ; and again, "Great men are the most indebted ;" that is, great men translate the world for us ; they are the voice of the great inarticulate mass of people surrounding them ; and this music of Beethoven is a hundred times more deeply representative of his mass of people than Haydn's was of his. So much intellectual freedom in the mass, so much more intellectual freedom in the master. Where Haydn's music touched the surface of his life and times, revealing customs and manners, and in its inner significance being of necessity restrained, Beethoven plunges into the very heart of things, careless of form and ceremony, impatient of restraint, intent only on dealing with things as they are, and not caring at all about the unessentials.

To illustrate this period I have chosen a great composition by Beethoven, the Trio, Op. 97, parts of which we shall play for you. You will hear in it the new war-cry of equality, of independence ; it is full of challenge. Scorning an elegance that means nothing, disdaining to merely amuse us or set us a-dancing, it speaks directly and unequivocally to something within us and finds an answer in the breast of everyone who has the spirit to strive at all. For this is no longer the music of repose ; it is full of struggle ; Promethian-like, it strains to break the bonds which hold it, sometimes distorting its face in the struggle, sometimes laughing sardonically, but at all times with the heroic temper. Instead of the clear and simple harmony of Haydn we have new dissonances expressive of feelings of anger, impatience, or unrest. The conventionality of the old treatment has been given over for a perfectly free and untrammelled sincerity ; no more humdrum accompaniments ; no more elegant turns and formal embellishments in the melody ; everywhere a kind of noble independence ; the motto is no longer "beauty," but "expression."

So that, in the passing from one period to another, from the repose of the old time to the unrest of the new, we have seen music reflecting the changes in civilization most vividly. These hero songs of Beethoven are not only descriptive of his time and the feelings which were in men's hearts then ; they are the very essence of it. Hear them and you get a light on the times which nothing else will give you. And if you examine their structure, you will find a well-defined plan, such as would govern the making of a book or a play ; a plan which conforms to the same laws of construction which govern in all art ; in short, an organism without which nothing can live, neither the human body nor an institution nor an art. This piece of music has its setting, its characters, its episodes, its dénouement ; every note in it is related to all the others ; there are no

unnecessary phrases; all is evolved with the skill of a great novelist. As the painter gives you wonderful contrasts of light and shade, as the playwright prepares his climax in the most effective way, so here you have all the composer's skill and fancy brought into play to enhance the beauty of his thought.

This wonderful scherzo we have played has in it the whole story of rustic life; Balzac could not have made it more true, nor more vivid in its delineation. Joyful happiness without a cloud; the wild frenzy of the dance; dumb sorrow, which seems almost that of a brute; and here and there wonderful mysterious touches of fancy. Compare it with its precursor, the minuet of Haydn and Mozart, and you see what new thoughts have come into men's hearts, and how much more articulate those thoughts and feelings have become.

If it seems at times too violent in its methods; if it only says, "I am as good as you are," and forgets (as Lowell has so wittily put it) to say, "You are as good as I am," we remember that there were few champions of the new ideas in Beethoven's time, and hard blows had to be struck, else the fight were not won. To him personal happiness had been largely denied, save in his work; he never was capable of scheming for his own profit; he offended some of his noble patrons by his independent manners, and in his life, as in his music, you see the same spirit of impatience that men were willing to be slaves when they might be free.

The third period I have chosen is our own time, to represent which we shall play you a part of one of Brahms' sonatas for violin and piano. It is, of course, much more difficult to form a concise and correct idea of the time we live in than it is of a time which we see more or less in perspective. The forces at work at the early part of the nineteenth century, and the effect they produced in art, are more or less easy of apprehension by us now. But today, when life is so complex and many-sided, when inventions of all sorts have produced a kind of cosmopolitan civilization all over the world, and the threads are so many and so raveled together, the forming of any pattern from them is well-nigh impossible.

What have we learned in these years? We have learned a little at least of that divine doctrine that the happiness of the greatest number should be the end of our efforts in civilization; we have softened somewhat the old cry of equality; we know that all men are not born free and equal; we have greater pity for the helpless and unfortunate; as a result of the freeing of our souls from the old trammels, our natures have taken on a new dignity; the individual, instead of being merely one of a great mass of people who were of no account in the world, has now an opportunity to develop to the utmost of his powers; all the events and all the feelings of our lives now take on a significance not known in the old time; we have learned to love nature in her simplicity; in every

way we have gained in humanity. Here is, indeed, a tangled web of influences out of which we must try to unravel something clear and significant.

Perhaps, if I take the development in poetry during this same period, I can arrive by a side-track at the significance of the music of Brahms. The old poetry was rhythmical, simple, and direct; its images were clear, its style somewhat didactic, and, while imaginative often to a very high degree, it was not involved. To take a familiar example:

The curfew tolls the knell of parting day,
The lowing herd winds slowly o'er the lea,
The ploughman homeward plods his weary way,
And leaves the world to darkness and to me.

Here is the perfect undulating rhythm of Haydn's music; here, also, you find the simplicity and directness which make the tunes of that time seem to us so obvious. It is without either complications of style or matter; there is no symbolism; there is no introspection. In our time we have poetry of the most involved description, whose images are sometimes far from clear, and whose style is anything but didactic; poetry in which rhythm of the old sort has nearly disappeared, and in its place has come a great sweeping under-rhythm, as different from the old as the great swelling waves of the sea are different from the little soft ripples on its bosom. Words, instead of standing for what they mean directly, are symbolic and suggestive. Life is a hundred times more significant. We see the relationship between things, and when we wish to express ourselves in poetry, we take symbols which express these relationships, instead of bare words. Partly this is due to the compression or condensation which has become necessary in our modern life, partly to the introspection which has come to be so common with most of us, and partly to the natural development of style, or the manner of saying things.

Almost any modern poet can furnish an illustration of this. For example, Whitman, in the wonderful poem on Lincoln:

When lilacs last in the door-yard bloomed,
And the great star drooped in the western sky at night,
I mourned and yet shall mourn with ever-returning spring —
Ever-returning spring, trinity sure to me you bring,
Lilac-blooming perennial and drooping star in the west,
And thoughts of him I love.

Browning, in "Old Pictures in Florence," gives us some of this modern way of looking at things, while George Meredith, in common with some other modern writers and painters, often carries it to excess, as in the following lines:

He cancelled the ravaging plague
By the roll of his fat off the cliff;
Do thou the same with thy lean
As the weapon of ink,
Though they call thee an angler
Who fishes the vague
And catches the not too pink.

Music has gone thru exactly this same transformation. The tunes of Haydn, Mozart, and even Beethoven, are satisfied to be tunes and nothing more. They say what, and all that, they mean. The music of Brahms is full of a significance beyond the outer shell of it; it stands for something more than that; it is symbolic. Its style is the style of today; involved as compared with Beethoven's; as free rhythmically as Whitman's poetry; imaginative to a degree, and satisfying the demand, which we now make, that art shall cease to deal with forgotten ideals and turn itself to life as it is. "To paint man, man;" to beautify and enrich life as it is here now, rather than to sing the praises of deeds long since done; to find the heaven that lies within us, rather than to look longingly toward one beyond our vision.

So that, when we look at music from this standpoint alone and understand its structure and the various stages of its development, we see in it a kind of deeper history; a relating of inward facts, "a real epic made of history; that is to say, a perfected melodious truth, the essence of it fairly evolved from all the chaff, the portrait of it actually given, and its real harmonies with the laws of this universe brought out."

Granting all this, allowing that music is all I have said, the final question must be: What is its purpose in the scheme of life? Are the great masterpieces of music anything more than a series of historical tone-pictures? Let me begin answering these questions by clearing the ground of some *débris* which we have inherited from the old style of criticism. In the first place, then, music means nothing; teaches no code of morals; lays down no line of conduct; to a much less extent than painting or sculpture is it a guide to life. Secondly, it is no more divine than the other arts (as has often been claimed in the past), nor can it be said to be divine at all except in the sense that a great piece of engineering is divine. Looking at the art dispassionately, we must at least grant this much. There are, however, many significant facts on the other side. I will begin with the simplest and most important. Here is a faculty—we will call it that—which is shared by vast numbers of peoples of different tongues; millions on millions of them, with different customs, habits, and sympathies, find in it a common bond of union. Not only that, but, in a certain sense, it speaks to each individual of that vast number in his *own* language. This is in itself a sufficiently significant fact. Anything which transcends great differences between such vast bodies of people is in itself a force to be reckoned with. Perhaps you remember that splendid passage in Carlyle's *Frederick the Great*, where he describes the famous march before the battle of Leuthen. Frederick was going out against vastly superior numbers. Thru the long, silent night his men tramped on, with what thoughts we may imagine. Many of them were to die, as they knew full well. Dumb, patient creatures they were, without any of our modern speculation and inward

questionings, bent only on doing their duty by their king. As they tramped on thru the stilly night there burst from them a song: a hymn of praise, an old, old prayer for help in time of need. Inarticulate creatures, these, save in this one faculty shared in common, irrespective of tongues or conditions. What does that song mean? Isn't there something in it beyond the words? Doesn't the blood flow quicker, the heart grow warmer, as each feels the strength of a common sympathy and a common purpose as they sing the old, old tunes? Is there not something in their hearts beyond what words can teach? Could they—would they—have expressed it, but for the music?

We are reminded of Voltaire's famous gibe: "What is too silly to be said is sung." Shall we not rather say: What is beyond the reach of words may find expression in music?

Darwin's pathetic statement that he had become, thru his entire devotion to scientific pursuits, a mere machine for cataloging the habits of earthworms, and that poetry and music were no longer a pleasure to him; the testimony of our own experience, if we have ever come under the influence of Beethoven or Brahms, or of our own observation of those hard-headed people who have never felt the softening and ennobling influence of music, and who look on the world of the imagination as an entire unreality; Ruskin's saying that the love of beauty is a natural instinct in every healthy human soul; Emerson's famous lines from "The Rhodora":

. . . . If eyes were made for seeing,
Then beauty is its own excuse for being;

Carlyle's "See deeply enough and you see musically"—these and a hundred other significant facts testify to the value of music as a factor in life.

The old poets who sang of the music of the spheres and of celestial harmonies, who tell us that all things pulsate with a divine rhythm, and that life is everywhere and always a harmony, were not merely euphonic. May it not be that, after we have resolved the many dissonances of which life is now so full, but which are lessening year by year, we shall at last come to a perfect harmony and live in that world of music of which the old prophets sang?

DEPARTMENT OF SUPERINTENDENCE

CHICAGO MEETING, 1901

SECRETARY'S MINUTES

FIRST DAY

MORNING SESSION.—TUESDAY, FEBRUARY 26, 1901

The Department of Superintendence was called to order in University Hall of the Fine Arts Building, Chicago, Ill., at 10 A. M., President L. D. Harvey in the chair.

Prayer was offered by Dr. E. E. White, Columbus, O.

After a few announcements by the president, Mr. E. G. Cooley, superintendent of the Chicago schools, was introduced and presented the first paper of the meeting, upon "The Gospel of Work." The paper was discussed by Superintendent E. H. Mark, Louisville, Ky.

Mr. Howard J. Rogers, director of education and social economy, United States exhibit at the Paris Exposition, gave an address upon "Education at the Paris Exposition."

The following question had been assigned a place upon the program by vote of the department at the meeting in 1900:

Should the Department of Superintendence memorialize the Board of Directors of the National Educational Association to appropriate the sum of \$1,000 for each of the next five years, to be expended in promoting the cause of simplifying our English spelling, under the direction of a commission to be named by this body?

The discussion of the question was opened by Mr. E. O. Vaile, editor of the *Intelligence*, Oak Park, Ill. Others participating in the discussion were: John MacDonald, editor of the *Western School Journal*, Topeka, Kan.; Principal E. B. Prettyman, Maryland; Colonel F. W. Parker, Chicago; Mr. Slosson Thompson, of the *Times-Herald*, Chicago; and Superintendent Joseph Carter, Champaign, Ill.

The time for the discussion having expired, and announcement to that effect being made by the president, Mr. Soldan, St. Louis, moved that the time be extended thirty minutes. Carried.

The discussion was continued by Dr. E. E. White, Columbus, O.; Superintendent L. H. Jones, Cleveland, O.; Dr. W. T. Harris, United States Commissioner of Education; and was closed by Mr. Vaile, who offered the following resolution:

Resolved, That this department respectfully presents the following petition to the Board of Directors of the National Educational Association, and asks for its favorable action thereon. [For full text of the petition see Mr. Vaile's address, p. 209.]

Superintendent C. G. Pearse, Omaha, Neb., moved that the resolution be indefinitely postponed. Superintendent Joseph H. Carter, Champaign, Ill., moved to lay the motion to postpone upon the table. Vote upon motion to table: yeas, 74; nays, 104. Motion declared lost. Vote upon indefinite postponement: yeas, 105; nays, 77. The motion to indefinitely postpone was declared carried. Motion to adjourn to 2:30 P. M. carried.

AFTERNOON SESSION

The department was called to order by President Harvey at 2:40 P. M.

Superintendent J. M. Greenwood presented a paper upon "The Past and Future

Work of the Department of Superintendence." Superintendent F. B. Cooper, Salt Lake City, Utah, opened the discussion.

Dr. E. E. White moved that the paper of Superintendent Greenwood be published by the Board of Directors in form for general distribution. The motion was amended to include Dr. White's "Historical Sketch of the Department." Carried.

Dr. W. S. Christopher, Chicago, gave an address upon "Medical Inspection in Schools." The following discussion was participated in by Superintendent Aaron Gove, Denver; Superintendent E. P. Seaver, Boston; Superintendent W. H. Maxwell, New York city; and Dr. W. O. Krohn, Chicago.

After various announcements the meeting adjourned to meet at 8:15 P. M.

EVENING SESSION

The meeting was called to order at 8:15 P. M. by President Harvey. The president announced that President Arthur T. Hadley of Yale University, who was to have delivered the address of the evening, had been called home by the dangerous illness of his daughter. He then introduced President James H. Baker of the University of Colorado, who by invitation read President Hadley's address upon "The Use and Control of Examinations."

The meeting adjourned to 9:30 Wednesday morning.

SECOND DAY

MORNING SESSION.—WEDNESDAY, FEBRUARY 27

The meeting was called to order by President Harvey at 9:50 A. M.

The following committees were announced:

COMMITTEE ON RESOLUTIONS

Superintendent L. H. Jones, Cleveland, O.

Superintendent C. E. Chadsey, North Denver, Colo.

State Superintendent C. J. Baxter, New Jersey.

COMMITTEE ON NOMINATIONS

Principal E. O. Lyte, Millersville, Pa.

Superintendent Frank A. Smith, Lawrence, Kan.

Superintendent McHenry Rhoads, Owensboro, Ky.

State Superintendent Alfred Baylis, Illinois.

Superintendent L. L. Wright, Ironwood, Mich.

Papers were presented by J. H. Trybom, supervisor of manual training, Detroit, Mich., on "Manual Training in the Elementary Schools of Detroit;" by Principal Henry S. Tibbits, Chicago, Ill., on "The Progress and Aims of Domestic Science in Chicago;" by Superintendent Judson E. Hoyt, Menomonie, Wis., on "Work in Manual Training in the Public Schools of Menomonie, Wis."

Dr. A. E. Winship, Boston, was recognized at this point, and in a brief speech presented President Harvey with a gavel with which to regulate discussion.

The papers presented were discussed by Colonel F. W. Parker, Mr. J. H. Stout, Menomonie, Wis.; Mr. Bevans, Aurora, Ill.; Superintendent Joseph Carter, Champaign, Ill.; Professor C. M. Woodward, St. Louis; Superintendent George Griffith, Utica, N. Y.; and Mr. Trybom, Detroit.

Professor R. Charles Bates, supervisor of manual training, Tome Institute, Port Deposit, Md., read a paper on the "Possibilities of Manual Training for Moral Ends."

After various announcements the meeting adjourned.

AFTERNOON SESSION

Round-table meetings were held during the afternoon as follows, convening at 2 P. M.:

I. "City Superintendents in Large Cities."

Leader, Superintendent F. Louis Soldan, St. Louis.

The topic discussed was "Organization of the Work of Inspection and Supervision thru Assistant Teachers and Principals, so as to Reach the Grade Teacher."

The discussion was participated in by Superintendent L. H. Jones, Cleveland, O.; Superintendent William F. Slayton, Atlanta, Ga.; Superintendent H. O. R. Siefert, Milwaukee, Wis.; District Superintendent Leslie Lewis, Chicago; Superintendent William N. Hailmann, Dayton, O.; Mr. Anderson, Milwaukee, Wis.; Superintendent Soldan, St. Louis; Superintendent Z. H. Brown, Nashville, Tenn.; Superintendent William J. M. Cox, Moline, Ill.; District Superintendent Miss M. Elizabeth Farson, Chicago; Superintendent Thomas M. Balliet, Springfield, Mass.; Superintendent E. H. Mark, Louisville, Ky.; District Superintendent A. G. Lane, Chicago; Superintendent C. G. Pearse, Omaha; District Superintendent Charles D. Lowry, Chicago.

II. "City Superintendents in Small Cities."

Section A.—Leader, Superintendent L. E. Wolfe, Kansas City, Kan.

The questions discussed were: "The Work of the Superintendent in Small Cities in Developing Greater Efficiency in the Teaching Force;" "The Advancement of Pupils thru the Grades along a Straight, Rather than a Broken, Line of Progress;" "How Shall We Secure Better Teaching from Those under Our Supervision?"

The discussion of the first question was participated in by Superintendent A. K. Whitcomb, Lowell, Mass.; Superintendent J. H. Glotfelter, Atchison, Kan.; Superintendent W. F. F. Selleck, Austin, Minn.; Superintendent Joseph Carter, Champaign, Ill.; Superintendent Darius Steward, Stillwater, Minn.

President I. C. McNeill of the West Superior Normal School, Wisconsin, opened the discussion of the second question named, and it was continued by Superintendent Arthur Powell, Marion, O.; Superintendent R. A. Ogg, Kokomo, Ind.; Superintendent F. Treudley, Youngstown, O.; President John R. Kirk, State Normal School, Kirksville, Mo.; Superintendent M. A. Whitney, Elgin, Ill.; Superintendent F. V. Hubbard, Red Wing, Minn.; Superintendent John Richeson, East St. Louis, Ill.; Superintendent George V. Buchanan, Sedalia, Mo.; Superintendent McDonald, Henderson, Ky.; Professor C. M. Woodward, St. Louis; Superintendent Aaron Gove, Denver; Superintendent P. R. Walker, Rockford, Ill.

Superintendent George Griffith, Utica, N. Y., discussed the question: "How Shall We Secure Better Teaching from Those under Our Supervision?"

Section B.—Leader, Superintendent William J. Shearer, Elizabeth, N. J.

The topic discussed was: "Grading for Efficient Organization in the Interest of Pupils."

Those participating in the discussion were: Superintendent Shearer; Superintendent E. N. Coleman, Fort Dodge, Ia.; Superintendent Charles W. Deane, Bridgeport, Conn.

Section C.—Leader, Superintendent T. A. Mott, Richmond, Ind.

The subject discussed was: "Correlation of High-School and Grammar-Grade Work."

The discussion was opened by Superintendent F. D. Boynton, Ithaca, N. Y., and continued by Superintendent C. M. Bardwell, Aurora, Ill.; Professor A. F. Smith, Kansas City, Mo.; Professor Daniel E. Phillips, Denver University; Principal George H. Rockwood, Chicago; Superintendent C. S. Marsh, North Tonawanda, N. Y.; Superintendent T. A. Mott, Richmond, Ind.; Superintendent Smith, Danville, Ill.; Dr. A. E. Winship, Boston; Superintendent J. F. Keating, Pueblo, Colo.; Superintendent J. N. Study, Fort Wayne, Ind.; Principal Samuel B. Hursh, Streator, Ill.; Superintendent Edward Ayres, La Fayette, Ind.; Superintendent Barto, Princeton, Ill.; Superintendent J. W. Carr, Anderson, Ind.; Superintendent B. F. Moore, Marion, Ind.

The discussion was concluded by Superintendent Boynton, Ithaca, who summed up the points made in the discussion.

Section D.—Leader, Augustus S. Downing, principal of Teachers' Training School, New York, N. Y.

The question under discussion was "Literature in Grades below the High School."

The discussion was opened by Miss Mae E. Schreiber, of the Department of Public Instruction, Madison, Wis.

III. "State and County Superintendents."

Leader, State Superintendent L. D. Bonebrake, Ohio.

The topic discussed was: "The Consolidation of Schools and Transportation of Pupils."

The discussion was opened by State Superintendent Alfred Bayliss, Illinois. Others participating were: County Superintendent O. J. Kern, Rockford, Ill.; Superintendent Gross, De Kalb county, Ill.; State Superintendent Frank L. Jones, Indiana; Professor A. J. Hutton, Whitewater Normal School, Wisconsin; Superintendent A. B. Graham, Springfield, O.; State Superintendent J. W. Olsen, Minnesota; State Superintendent R. C. Barrett, Iowa; State Superintendent Skinner, New York; Superintendent Natrass, La Fayette county, Wis.; County Superintendent Miss Fanny G. Gies, Mower county, Minn.; County Superintendent O. T. Bright, Cook county, Ill.; State Superintendent W. T. Carrington, Missouri; State Superintendent T. T. Tynan, Wyoming.

After the close of the discussion Chairman Bonebrake introduced Division Superintendent M. S. Stone, of the Philippine Islands, who spoke of educational work in those islands.

Superintendent Bayliss introduced the following resolution, which was adopted:

Resolved—

1. That it is the opinion of this round table of state and county superintendents that it is desirable that we have legislation providing that any group of school districts may be consolidated, and provision be made for carrying children to and from school at public expense.
2. That it is desirable that the proposition be systematically presented to the people of rural communities.
3. That we ask that the question be made a part of the general program of the Department of Superintendence for next year.

State Superintendent Charles R. Skinner, of New York, made a motion that a committee of three be selected to present a report on the present conditions of rural schools to the directors of the National Educational Association at Detroit next July, and to ask for an appropriation to carry on further investigation of consolidation of schools and transportation of pupils. The motion was amended to a "committee of five" and carried. A committee, composed of Superintendent Alfred Bayliss, of Illinois; Superintendent R. C. Barrett, of Iowa; Superintendent Frank L. Jones, of Indiana; Superintendent Charles R. Skinner, of New York; and State Commissioner L. D. Bonebrake, of Ohio, was then appointed.

The following officers of the round table were elected for next year: chairman, Hon. Frank L. Jones, state superintendent of Indiana; secretary, Miss Fanny G. Gies, superintendent of schools of Mower county, Minn.

On motion, the meeting adjourned until the second day of the National Educational Association at Detroit next July.

IV. Round Table of Training Teachers.

Leader, Miss Isabel Lawrence, St. Cloud, Minn.

The subject discussed was: "The Observation of Experts as a Means of Training—Its Value and Limitations."

Those taking part in the discussion were: Miss Sarah C. Brooks, supervisor of primary schools, St. Paul; Professor J. S. Gaylord, State Normal School, Winona, Minn.; Superintendent W. A. Shoemaker, St. Cloud, Minn.; Miss Amalie Hofer, *Kindergarten Magazine*, Chicago; President John W. Cook, Northern Illinois State Normal School, De Kalb; Principal W. A. Baldwin, State Normal School, Hyannis, Mass.; Mr. E. C. Bronson, Normal School, Athens, Ga.; Miss Ada Van Stone Harris, supervisor of primary schools, Newark, N. J.; Professor G. E. Maxwell, State Normal School, Winona, Minn.; Miss Hughes, Cambridge, Eng.; Miss Katherine Dopp, Chicago; Dean James E. Russell, Teachers College, New York.

THIRD DAY

MORNING SESSION.—THURSDAY, FEBRUARY 28

The meeting was called to order at 9:50, President Harvey in the chair.

After announcements, the president introduced District Superintendent A. G. Lane, Chicago, chairman of the Committee on Physiology in Schools, appointed at the meeting of the department in 1900.

Mr. Lane presented the following report:

The undersigned committee of the Department of Superintendence was appointed under the following resolution:

Resolved, That the chair appoint a committee of seven, whose duty it shall be to report upon the teaching of physiology in the schools, especially with regard to the condition and progress of scientific inquiry as to the action of alcohol upon the human system, and to recommend what action, if any, by this department, is justified by the results of these inquiries.

Your committee recommends the adoption of the following report:

The Department of Superintendence agrees cordially with the special advocates of the temperance cause in holding that everything which public instruction can do in the battle against intemperance ought to be done, and that both physiology and hygiene should be so taught as to leave in the minds of children and youth an adequate and proper knowledge of the effects of alcoholic drinks and stimulants, and of narcotics, on the human system.

Since the last meeting of this department there has been considerable discussion of the question as to whether alcohol under any conditions is properly to be defined as an article of food. Medical authorities are quoted in support of both sides of this question; but no authority has been found to maintain that alcohol is a food in the ordinary sense of that term. The question of the supposed food value of alcohol is a technical one for medical experts to determine, and not one which need concern the men and women who are engaged in the work of public instruction of children and youth. For them it is enough to know that its use as a beverage is injurious, and that all authorities agree in deprecating the formation of the drinking habit and in commending all practicable efforts, thru public instruction, to promote the cause of temperance.

The questions of highest importance for teachers and superintendents of schools to consider are those which relate to the methods by which temperance instruction shall be imparted, the extent to which it shall be carried, and the subject-matter to be presented.

The educational side of this subject is vitally important and demands thoro and systematic study.

We therefore recommend that a body of educational doctrine be formulated which may guide temperance instruction in the schools thruout the country, and we further recommend that the scope of the investigation be so enlarged as to cover, not only the topics already suggested, but also the whole field of personal hygiene, so far as this is a practicable matter for school instruction.

We also recommend that this investigation be conducted under the direction of the National Council of Education, in accordance with the regulations of the National Educational Association.

ALBERT G. LANE.

O. T. CORSON.

F. LOUIS SOLDAN.

E. O. LYTE.

EDWIN P. SEAVER.

JAMES H. VAN SICKLE.

EDWIN A. ALDERMAN.

Upon motion of Mr. Lane, seconded by Henry Sabin, of Iowa, the report was adopted without debate.

A paper on "Individual Instruction an Imperative Need in Our Schools" was given by Superintendent John Kennedy, Batavia, N. Y. The discussion was opened by President Jesse F. Millspaugh, Winona, Minn., and was continued by Dr. G. Stanley Hall, of Clark University; Superintendent A. K. Whitcomb; State Superintendent Delos Fall, of Michigan; Superintendent T. M. Balliet; and concluded by Superintendent Kennedy.

Dr. E. O. Lyte presented the report of the Committee on Nominations, as follows:

The committee appointed by the president of the department to nominate officers of the department for the ensuing year begs leave to submit the following report:

The officers nominated by the committee are as follows:

For President—G. R. Glean, state school commissioner, Georgia.

For First Vice-President—H. P. Emerson, city superintendent, Buffalo, N. Y.

For Second Vice-President—F. W. Cooley, city superintendent, Calumet, Mich.;

For Secretary—John W. Dietrich, city superintendent, Colorado Springs, Colo.

Upon motion of Superintendent O. T. Bright, the secretary was directed to cast the ballot of the department for the nominees named in the report. The secretary reported that he had so cast the ballot, and the officers named in the report were declared elected.

Superintendent William J. M. Cox, Moline, Ill., offered the following:

Resolved—

1. That a committee of seven be appointed by the president of the department for the careful examination of the papers, addresses, and discussions dealing directly with the work of school supervision, heretofore presented in the meetings of the National Educational Association, the Department of Superintendence, and the Council of Education, for the purpose of culling from the mass of material thus accumulated such parts thereof as the committee shall deem worthy of publication in a special report, supplementing the several papers and excerpts by such authoritative statements, notes, and suggestions as may be found necessary or desirable.

2. That we request the Board of Directors of the National Educational Association to provide for the publication of said report in such form and numbers as the committee shall recommend.

Upon motion, the resolution was adopted. Mr. Ossian H. Lang moved that the department memorialize the Board of Directors of the National Educational Association to appropriate \$200 to defray the expenses of the committee provided for in the foregoing resolution.

Superintendent L. H. Jones, Cleveland, chairman of the Committee on Resolutions, presented the report of the Committee on Resolutions as follows:

Resolved—

1. That the sincere thanks of this department are due, and are hereby offered, to the president and other officers of this body for the wise selection of topics for our discussion, for the dignified and able management of the work of the department, and for the courteous treatment of members during the progress of the different sessions of the present meeting; and that our thanks be extended to those who have prepared papers or discussions to our interest and advantage.

2. That this department hereby expresses its interest in the problem of centralization of rural schools and the transportation of pupils at public expense, now being practiced so successfully in many states, and that we see in this movement possibilities of great improvement of rural schools, involving the excellences of a graded system of instruction without the attendant evils consequent upon the crowded conditions of tenement life in cities; and, further, that we look upon this movement as having important bearing upon the solution of pressing sociological as well as educational problems, and that this topic be recommended to the officers-elect of this body as worthy a place upon the general program of this department at its next meeting.

3. That this department expresses its great gratification at the progress made evident by exercises before this body at this meeting in the work of manual training in the public schools of the country, and especially at the fact that this department of education has ceased to be presented as a sensational element of a fragmentary and one-sided training for special industries, and has taken its place as an essential part of the education of a free people intent upon the complete and harmonious development of the individual, opening for him, not a single line, but the whole field of human endeavor.

4. That this department extends its thanks to the permanent Secretary of the National Educational Association for the never-failing wisdom and courtesy shown at this meeting, as at all times, in dealing with the questions which grow out of the relation of this department to the general association, and especially with details of transportation of members, and that he be commended for the system and efficiency which he has introduced and maintained in his department.

L. H. JONES, *Chairman*.

C. E. CHADSEY.

C. J. BAXTER.

Superintendent Aaron Gove moved that a committee of three be appointed by the chair to report a year hence a constitution and by-laws for the department under the limitations of the constitution and by-laws of the National Educational Association. Carried.

Superintendent R. G. Boone, Cincinnati, being recognized by the chair, presented an invitation to the department to meet at Cincinnati in 1902. Superintendent G. R. Glenn, of Georgia, seconded for Cincinnati.

Superintendent E. G. Cooley, Chicago, invited the department to meet in Chicago in 1902.

State Superintendent W. W. Welch, of Montana, invited the department to meet in Helena, Mont.

Superintendent Gove expressed regret at manifestations of a disposition to return to the old order of things and to adopt an itinerant policy. He favored continuing the meeting at Chicago. Superintendent Blodgett, Syracuse, spoke in favor of the itinerant plan. Superintendent O'Connor, of Nebraska, favored Chicago.

John McDonald, of Kansas, invited the department to meet in Wichita, Kan.

State Superintendent Skinner, of New York, favored Chicago. Superintendent Pearse, Omaha, spoke for Chicago.

The department then proceeded to vote for the location of the meeting for 1902. Cincinnati received 109 votes; Chicago, 126 votes; Helena, 6 votes; Wichita, 1 vote. Chicago, having received the highest number of votes, was declared to be the choice of the department for the meeting in 1902.

President Harvey then introduced President Green of the National Educational Association, who addressed the department briefly regarding the meeting of the National Educational Association at Detroit in July, 1901.

The department then adjourned to meet at 2 P. M.

AFTERNOON SESSION

The department convened at 2 P. M., President Harvey in the chair.

Superintendent R. G. Boone of the Cincinnati schools read a paper upon "A Standard Course of Study for Elementary Schools in Cities."

The discussion was led by President A. S. Draper of the University of Illinois, and participated in further by Superintendent F. Louis Soldan, St. Louis.

Professor L. B. R. Briggs, of Harvard University, gave a paper upon "Some Aspects of Public-School Training."

The paper was discussed by Dr. William T. Harris, Washington; Dr. C. A. McMurry, State Normal School, De Kalb, Ill.; Superintendent William N. Hailmann, Dayton, O.; President R. H. Halsey, State Normal School, Oshkosh, Wis.; and Superintendent R. G. Boone.

The meeting then adjourned to convene again at 8:15 P. M.

EVENING SESSION

The department was called to order at 8:15 P. M. by President Harvey.

Professor John Dewey, Chicago, gave the address of the evening, on "The Situation as Regards the Course of Study."

President Harvey announced the following committees, appointed in pursuance of resolutions passed by the department during the convention:

COMMITTEE ON SELECTION AND PUBLICATION OF MATERIAL RELATING TO CITY-SCHOOL SUPERVISION

Superintendent J. M. Greenwood, Kansas City, Mo. President R. H. Halsey, State Normal School, Oshkosh, Wis.
Superintendent W. J. M. Cox, Moline, Ill.
Dr. Emerson E. White, Columbus, O. Professor Nicholas Murray Butler, Columbia University, New York city.
Superintendent E. H. Mark, Louisville, Ky.
State Superintendent N. C. Schaeffer, Harrisburg, Pa.

COMMITTEE TO FRAME CONSTITUTION AND BY-LAWS FOR THE DEPARTMENT OF SUPERINTENDENCE

Superintendent Aaron Gove, Denver, Colo. Superintendent R. G. Boone, Cincinnati, O.
Superintendent William H. Maxwell, New York city.

The convention then adjourned *sine die*.

FRANK B. COOPER, *Secretary*.

PAPERS AND DISCUSSIONS

THE GOSPEL OF WORK

EDWIN G. COOLEY, SUPERINTENDENT OF CITY SCHOOLS, CHICAGO, ILL.

We are living in a civilization with a penchant for action ; "hustle" is the watchword of the hour. A strenuous, or at least a clamorous, life is the only one worthy of the commendation of the American — that is, the American of the latitude and longitude of Chicago. Americans, individually and collectively, seem to be looking about for more worlds to conquer.

Men of our day organize into numerous civic and other missionary associations, ready to undertake the redress of every public grievance, at least so far as this redress can be brought about on the platform and around the dinner table. Our ladies, thru their numerous clubs, are adding to the homely affairs of the household the task of the mental, moral, and physical regeneration of society. As a nation, we seem ready to undertake the larger responsibilities of world-regulation. In addition to the task of absorbing the thousands of aliens who are seeking our hospitable shores, we are taking up the work of a national colporteur in foreign lands and in strange climes. Expansion and optimism are our ideals, as a nation and as individuals.

Along with this restless, active life has arisen a contempt for the passive virtues, and for people who profess, or who advocate, them. We seem to be ready to accept the doctrine that the earth and its fruits belong to those only who can use them, and who will and can use them according to modern ideas of the fitness of things. The red Indian who uses the earth as a hunting-ground cannot expect to keep the land away from him who will raise corn and hogs on it. The Filipino who uses rosewood for railroad ties ought not to be trusted with the stewardship of earth's wonderful resources. The Boer who persists in cattle-raising in a country that abounds in gold and diamond mines should not expect to be permitted to stand in the way of modern progress and civilization. We apply the parable of the talents to such cases with a vengeance, transforming it into the doctrine that "might makes right."

Our lawmaking bodies show an inordinate faith in the power of authority in the form of legislative action. Every winter sees its additional mountain of legislation ; and yet every reformer cries out for more, forgetting the most important factors of his problem — the officials who execute the laws, and the characteristics of the people who live under

them. Legislation is urged as tho life were passed in a vacuum and resistance were unknown.

Our schools have not escaped this modern tendency. We have been expanding with the rest. We have felt impelled to attempt the complete regeneration of society in four short years, regardless of thousands of years of opposing inheritances. We have been ready to undertake any new project that seemed to be of an educative nature, without considering its relations to other branches of work, or to the amount of unconsumed energy available. Happy and famous is the man or woman who has been able to set the schools a new task, for multitudes have arisen to call him a reformer.

The thorogoin belief in the efficiency of work and of the obligation of all mankind to work owes much to the evangelism of such men as Carlyle and Ruskin. Carlyle preached the gospel of work to a generation that looked for leadership and inspiration to men who had little or nothing to do. His *Sartor Resartus*, his *Heroes*, and his *Past and Present* are full of this gospel. He cries :

The world and all that is in it are the result of work. The great men in history, as well as the great races, have been those who earnestly worked. The old gospel was, "Know thyself;" the new is, "Know thy work and do it." All work is noble; a life of ease is not for any man. One monster there is in the world, the idle man. What is his religion? That nature is a phantasm, where cunning beggary or thievery may sometimes find good victual; that God is a lie; that man and his works are a lie.

Ruskin was almost equally earnest in his advocacy of work; and to precept added action. Many of us have read, with some amusement, of his road-building experiment with the Oxford students. But the young men who took part in this experiment never forgot the obligation he laid upon them, to labor—each within his particular province—with all his soul, with all his strength, and with all his mind.

The world has been greatly influenced by these teachings of Carlyle and Ruskin. In the lives of many of our famous men are to be found acknowledgments like that of Thomas Huxley, published in his recent *Life and Letters*. In recalling some of the powerful influences which have affected his life, Huxley speaks of the writings of Carlyle, and especially of *Sartor Resartus*. The idea that "work alone is noble; the doctrine that whatever of morality and of intelligence; what of patience, faithfulness of method, insight, ingenuity, energy; in a word, whatsoever of strength a man had in him lies written in the work he does," has been an inspiration to the youth of the nineteenth century. The renewed interest in Carlyle and his work, shown by the placing of one of his essays on the college reading list, is a happy omen of continued interest in his ideas.

The teacher, like all earnest men, believes in his mission, and has an almost unbounded faith in the efficiency of school work. He, like Carlyle,

may underestimate the strength of the inherited impulses and instincts he deals with. He has usually been willing to add mountains of work to his own and his pupils' burdens. Any "ology" whatever can find advocates for a place in the curriculum; and too many of them have already succeeded in crowding themselves upon the school. Only a Carlylean temperament could have induced the teacher to attempt the mountains of work prescribed in some of our school programs. It is not strange that he sometimes adds to this another Carlylean characteristic, that of grumbling a little. In his application of the doctrines of Carlyle he has failed to discriminate, to realize that what we want today is not more subjects to work at, but a change in our method of teaching that will be in accordance with Carlyle's doctrine—a change that will offer opportunities for real work.

In the following statement of Carlyle is, I believe, the kernel of modern educational doctrine. He says :

The knowledge that will hold good in working, cleave thou to that. Properly, thou hast no other knowledge but what thou hast by working; the rest is yet all a hypothesis of knowledge, a thing to be argued in the schools, a thing floating in the clouds in endless logic-vortices till we may try to fix it. Doubt of whatever kind can be ended by action alone. Man perfects himself by working. Destiny, on the whole, has no other way of cultivating us.

In this utilizing of the motor influences, in this return to Froebel's idea of self-activity, we are getting into line with the influences that are moving modern society. We are beginning to believe in the doctrine of Dr. John Dewey, "that the school has no other educational resources than those which exist outside of the schools; that, so far as the principle is concerned, it is simply a continuation of the same methods which are operative in the informal education." The knowledge we get in connection with some activity, some piece of work we are earnestly striving to do, we can cleave to that. All other knowledge is likely to be held in out-of-the-way compartments of the mind, where practical application to the problem of life can never come. We are utilizing these motor influences in many ways in our modern school. The kindergarten, constructive work, and nature study; our manual training, and most of the methods of teaching other subjects, are endeavors to turn motor impulses to use. As Dr. Dewey says :

We are coming to believe that the possibility of having knowledge become something more than the accumulation of facts and laws, of becoming actually operative in character and conduct, is dependent on the extent to which that information is evolved out of some need in the child's own experience and to which it receives application to that experience.

In other words, character-making is the result of *doing something*, is the result of the formation of habits. Indeed, we are almost ready for Carlyle's extreme statement : "All *work* is *religion*, and whatsoever religion is not work may go dwell among the Brahmins. *Laborare est orare*.

If labor is not worship, the more the pity for worship, for this is the noblest thing under God's sky."

While I am not an advocate of the soft pedagogy that is supported in some quarters, yet I believe that all work and no play makes Jack a dull boy; but I also believe that "all play and no work makes Jack a mere toy." I do not believe it is wise to endeavor to have the child believe that the work he is trying to do is *play*. I do not, on the other hand, believe in the doctrine of drudgery. I do not believe in an ideal of work that regards it merely as a preliminary to enjoyment, as something to be gotten over that enjoyment may follow. I do not believe in the doctrine that men should bear the repulsive burden of work in order that the remainder of life may be spent in idle enjoyment. I do not believe in a separation of work into drudgery and enjoyment. I do not believe that boys and girls in school should be taught to endure the drudgery of the schoolroom for the sake of any fun that is to follow. I do not believe in setting up a dualism between work and enjoyment, that will debase all work into mere drudgery. I believe that both boys and men, who are not overworked, enjoy the work which they can do well. Froebel taught, first, that the child develops thru creative activity; secondly, that the child is benefited by contact with other children, and is *happy* in proportion as he is *unselfishly employed*.

In addition to this, every observing person knows that the idea of drudgery during youth and manhood, with idleness and ease in old age as a reward for the drudgery, is an illusion. In Tennyson's "Ulysses" we see pictured the old hero's *ennui* at the prospect of a life of ease, and of his longing to continue the work in which his manhood had been passed :

I am become a name ;
For always roaming with a hungry heart.
Much have I seen and known — cities of men,
And manners, climates, councils, governments,
Myself not least, but honoured of them all —
And drunk delight of battle with my peers,
Far on the ringing plains of windy Troy.
I am a part of all that I have met ;
Yet all experience is an arch wherethro'
Gleams that untravelled world, whose margin fades
Forever and forever when I move.
How dull it is to pause, to make an end,
To rest unburnished, not to shine in use,
As tho' to breathe were life. Life piled on life
Were all too little, and of one to me
Little remains : but every hour is saved
From that eternal silence, something more,
A bringer of new things; and vile it were
For some three suns to store and hoard myself,
And this great spirit yearning in desire
To follow knowledge, like a sinking star,
Beyond the utmost bound of human thought.

Much of the irksomeness of labor is the result of a belief that all work is drudgery, to be hastened thru with as soon as possible. As long as we attempt to separate work into drudgery now and enjoyment later we shall have people asking whether life is worth living. If we can arouse in our young people the instinct of workmanship thru our manual training and other constructive work; if we can make them feel that labor well done is noble, much of the irksomeness will disappear. If our young people can be made to feel the moral obligation upon every member of society to work—to produce something—they will be better citizens. If they can be made to feel the supreme necessity of becoming interested in their work, they may expect happiness. If our notion of leisure is that of the Greeks, that leisure is only time and opportunity to prepare for the doing of a higher grade of work, the world will be the better for it.

DISCUSSION

SUPERINTENDENT E. H. MARK, Louisville, Ky.—I am interested in this particular subject and very much in accord with the positions taken by the reader of the paper. I especially like that part which says this is a working world. I believe in work, and work in school. I believe in the kindergarten, but I do not believe in carrying kindergarten work into the eighth grade and the high school. We are not getting full results from the energy we expend, because of our failure rightly to appreciate a proper application of work. Only about 20 per cent. of the energy spent in school is effective. We must not make the mistake of bedizening in order to make it appear that we are really working. We attempt sometimes to go outside of the old-fashioned ways, and I am of the opinion that this is not always wise. I believe in the old-fashioned ways, and that some of the things we are now doing would be less objectionable if we had not deserted the old ways of performing them. Boys and girls need to learn to do a few things and to do them well. They should also learn that there is dignity and joy in work.

EDUCATION AT THE PARIS EXPOSITION

HOWARD J. ROGERS, DIRECTOR OF EDUCATION AND SOCIAL ECONOMY FOR
THE COMMISSIONER-GENERAL OF THE UNITED STATES TO THE PARIS
EXPOSITION OF 1900

Mr. President, Ladies and Gentlemen:

One of the sad inflictions which follow in the wake of a great exposition is the individual who is always talking of it or lecturing on it. But, in spite of my desire to escape this fate, the invitation of your president was worded so graciously, and a public expression of the obligations of the United States commission for the loyal support of this association so manifestly due, that I felt constrained to accept.

I wanted also to retract, or modify, a statement made before this association two years ago at the Columbus meeting. In outlining the

plans for the United States exhibit I said that we had no national system of education ; that we had forty-five systems, with a few territorial annexes thrown in. While in a strictly literal sense this is true, practically it is not. We have today in the United States a greater unity and similarity in courses of study and methods of administration than exist in any other country in the world with the exception of France. The result of the rigid system of uniformity which enabled the French minister of public instruction a number of years ago to boast that he could look at the clock at any hour of the day and tell what every school child of France was doing, is still in evidence. But the United States educational exhibit at Paris, if it served no other purpose, demonstrated beyond question that the only differences in our educational methods are those of local emphasis, which do not affect the general tendency and unity.

Had the labels over a portion of the work of Boston or New York been interchanged for those of Denver or St. Louis, no one not having a knowledge of its local touches and coloring could have detected the difference. The plan of our exhibit, which placed the work of similar grades side by side, irrespective of localities, brought out this similarity in a most convincing manner. It was the cause of much comment on the part of foreigners and of much surprise on the part of Americans. An impression, more or less well defined, has undoubtedly been in the minds of educational people that this similarity existed, but it had never before been so strikingly demonstrated. We attributed the cause, in our explanations, to two sources : first, to the United States Bureau of Education ; its control over the states is purely advisory, but so wise has been its administration, so valuable the information which it has collected and distributed, and to such high renown has it attained under its present commissioner, that its influence as a harmonizing, directive, and unifying force is most powerful ; and, secondly, to the National Educational Association, whose meetings are the great clearing-house for educational ideas in this country. There is no need to dwell before this audience upon the value of this association as a common ground for interchange of thought, comparison of methods, forming of acquaintanceships, and promotion of confidence. Yet the magnitude of the organization was puzzling to foreigners and its formation the subject of much inquiry.

The place of education at the Paris exposition was theoretically all that could be desired, but practically there was much that could have been improved. Not yet at an international exposition has a building adequate been devoted solely to education. In Paris, in the Palace of Education was joined the exhibit of the liberal arts, Group III. Space was granted to each nation for both groups together, and the division between the groups left to the commissioner-general of that nation. As a consequence, while most of the exhibits were in the gallery, many were

on the ground floor; the continuity was broken, and in some instances, notably Germany, the whole space in this building devoted to the commercial products included under Group III.

From the scientific point of view, however, both as regards the exhibit, classification, and official recognition, education was given the precedence. This circumstance was particularly gratifying to the representatives of the United States, where the commercial spirit rules—dominates. The tendency of the French in this respect was particularly noticeable in the formation of the international juries. At least 50 per cent. of the membership of each class jury was French. The French representation in the six class juries of Group I, education, was concededly stronger than in any of the 121 classes. Men prominent in educational, literary, and scientific fields were eager to serve. Such names, well known in America, as Léon Bourgeois, former minister of public instruction, a member of the Chamber of Deputies, and the most prominent member for France in the Peace Congress, president not only of Class I, but of the entire superior jury; Liard, of the university; Ferdinand Buisson, whose report on American education in 1876 is a classic; Camille Sée, and others, give evidence of the caliber of the jury. An award granted after due deliberation by such a body of men bears more than the ordinary significance attached to exposition awards.

The direct control of the educational sections was vested in the minister of public instruction, one of the three most powerful ministers in the French cabinet. He has under his authority not only all elementary and secondary instruction, but the universities, the *beaux arts*, the salons, the national theaters, and the opera. To the minister, M. Georges Leygues, and his directors the foreign educational representatives were indebted for many courtesies from an exhibit standpoint and in official life.

There was one exception to the general control exercised by the minister of public instruction, viz., Class VI, industrial and commercial education. By a special law, passed a few years ago after considerable struggle, all industrial and technical schools were placed under the jurisdiction of the minister of commerce and industries. Inasmuch as the general management of the exposition fell under the latter ministry, the industrial schools demanded and received a separate building for their exhibit. This building was a small annex to the main Palace of Education, and contained only the work of French schools.

Five nations besides France took a leading part in the educational exhibit: the United States, Great Britain, Russia, Hungary, and Japan. A number of other nations, notably Sweden, Italy, and Spain, played lesser rôles.

To an American the most interesting phases of the exhibit were the expectant attitude of England, the awakening of Russia, the development of Japan, and the industrial training of Hungary and France.

England for the first time was represented at an international exposition. The exhibit of the great public schools of Eton, Harrow, Rugby, and Winchester was historic and highly attractive to Americans; the exhibit of Oxford and Cambridge was scientific and exhaustive; but the real interest lay in the efforts of the adherents to the education act of 1870 to push to its logical results the provisions of that act, and the eagerness of the progressive wing of the education office to adapt American ideas to English conditions. The figures published last year showed that for the first time the attendance on the board schools exceeded the attendance on the free denominational schools, and that the territory occupied by the latter is being rapidly absorbed. The next decade will see rapid advances in educational methods. The younger and more progressive elements are strong advocates of the prominent features of the system of the United States, and expect much from the influence which may be exerted, or rather the discussions and agitation which may arise, from the presence of the United States educational exhibit now in Manchester, England.

A word on the latter point may be in order now. Among the experts and delegates from other countries who examined our exhibit critically last summer, none were more sincere in their praise than the English. Their sincerity was best proven by their actions. The idea grew that many of the best features of American education, in spite of the fact that they were the product of a younger civilization and developed from totally different conditions, could be grafted into the English system. The problem was how best to enlist the attention of the British public. At this juncture Mr. John H. Reynolds, principal of the Municipal Technical School, Manchester, England, came forward with a proposition to transport the United States exhibit complete from Paris to Manchester, and set it up for exhibition in precisely the same form as at Paris. He submitted the plan to the Manchester municipal authorities, and, after sending a committee to investigate, they reported favorably. The director of education for the United States in the meantime had secured the consent of all the principal exhibitors to the transfer of the exhibit to Manchester, and the consequent delay in its return home. The Manchester authorities assumed the entire cost of packing and shipping the exhibit from Paris, its installation at Manchester, and its reshipment to New York. The exhibit was opened to the public in the latter part of January, and will remain until March. Concerning it one or two extracts from the English press are of interest:

No member of a technical instruction committee or of a school board, no governor or manager of a school, no teacher, whether in a primary or secondary school or university, can afford to miss such a rare opportunity, provided in so public-spirited a fashion. They will come, not from Manchester alone, but from all the country round. The general public also will find in it abundant interest and entertainment. The productions of the American art schools and the superb collection of photographs of school and college life

are in themselves worth going a long way to see. But the amount of pleasure and profit to be derived from a visit will depend largely upon the intelligence with which the visitor follows the scheme upon which the exhibit is displayed. . . . It is delightful to see so much care and pains bestowed on instruction in history in the primary and secondary schools, though one could wish that young Americans were not taught so sedulously to regard Britons as the enemies of the republic. At every turn one is struck with the extreme dexterity with which statistics are set out in graphic forms, sometimes in curves, sometimes in colored squares or columns, the relative size of which indicates ratios of figures.

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In this connection it is striking to observe in the kindergarten and primary sections the admirable educational skill with which taste and constructive power are developed and exercised in young children by the system of "free drawing" and brushwork, which is so infinitely more stimulating to the childish mind than the dry and abstract type of art work instituted by our South Kensington department. There are any number of other points which call for notice in this wonderful exhibition, but we can only advise everybody to go and see it for themselves.

* * * * *

Well, I need not pause to observe that in this particular section of the Paris exhibition there was no finer display than that made by the United States. It gives a bird's-eye view, as it were, of education as it exists in the States today. Its purpose is to represent the best work and the ripest methods, no matter whence their source within the limit of the United States. The field covered by the exhibit is so full, varied, and interesting that no outline can possibly do it justice; but, within the space at my disposal, if I can convey to the public an impression of what this exhibit is, I shall not be altogether dissatisfied.

We sincerely trust that some of the expectations of the promoters of the plan may be realized. It is a small seed, and a foreign public is a stony soil, but there may take root some features of American education which will prove of great benefit to popular education in England. That there will be any quickly apparent effect no one dreams. Evolution is a slow process; evolution in education one of its tardiest forms. But there exists no system of public education in any country which cannot be improved by the introduction of some of the best features from another country, and from this object-lesson planted in the center of the great industrial and manufacturing district of England, where the free and intelligent development of youth is a vital problem, and where admiration for American methods and American virility runs highest, much good may reasonably be expected.

The English educational exhibit showed strength and a rugged determination to work out a solution adapted to the great variety of conditions bequeathed from former generations; but a stronger and more hopeful sign was the intense earnestness of the younger, progressive schoolmen to find this proper adjustment of the ideal with the actual, and to determine just how much of improved methods can safely be introduced without clogging the machinery. It is a good sign, when men are dissatisfied with present conditions, to find them acting conservatively; keen for improvement, but with patience to wait. There will be fewer back-tracks to cover in the future.

In the Russian educational exhibit there was also an awakening to be

noted, but of an entirely different nature. In England it is the awakening of the leaders; in Russia it is the awakening of the people. In England it is the leaders who must urge; in Russia they must use the curb. There is a point in the uplifting of an ignorant populace that is near the danger line. It is when they begin to question, and there are none of their own class to answer. The attendance in the schools controlled by the minister of public instruction of Russia has doubled in the last ten years, and the attendance on the church schools, which number about one-third of the total number of the primary schools, has been equally increasing. There is no effort to compel attendance. There is not accommodation for those who clamor to come. Schools in the rural districts are at a great distance from each other, and great sacrifices are often made by parents to enable their children to attend school. In every district in the provinces there are children who travel daily many versts for the same purpose. With such a spirit in the people the responsibility on the government is doubled. It not only has to provide schools in sufficient numbers to prevent the cry of inequity, but it must control the unrest which inevitably follows the consciousness of growing power.

There is no antagonism between the church and state schools. There is no reason why there should be. The head of the state is the head of the church. There is oftentimes a keen rivalry in neighboring provinces and districts, but most of the new schools established are under the ministry, and if the inhabitants of a district so decide, the church school therein is turned over to the ministerial supervision. The school term in Russia is three years of six months' instruction each year—a small total when compared with our own elementary course, but a great advance over the serfdom and ignorance of a few decades ago. I have confined myself, in speaking of Russia, to the common schools, as they formed the larger and more interesting part of the exhibit from a sociological standpoint. Of the exhibit of many excellent high schools in cities, the technical schools and universities, and the efforts in St. Petersburg for the higher education of women much might be said, but it would extend too far the limits of this discussion.

The Japanese exhibit was exactly what we expected it to be. Those who recall the educational exhibit of Japan in Chicago in 1893 and the promise which it contained will readily understand this statement. The increase in attendance during the last decade was over 80 per cent., and in the ten years between 1888 and 1898 the government expenditures for elementary education jumped from eight to eighteen million dollars. Their elementary instruction seems designed to increase that proficiency in industrial pursuits for which they are already noted, and to render more perfect that lightness of touch and delicacy of design which characterize the art of the nation. They are a progressive nation, alert and quiet. I did not hear a Japanese juror make a remark during the exposition; but I do not

remember anything they did not see. I never heard a Japanese educator talk anyway, which is at least one remarkable difference between the "Yankees of the East" and the Yankees of the West. The technical and higher instruction of the Japanese is thoroly well outlined and tends toward the same great object—the industrial development of the nation. Perhaps no economic truth was more seriously impressed on the western nations by the exposition than that Japan, thru its rapid development in decorative art and designing, and thru its cheap labor, will soon become a formidable competitor in the markets of the world. The Japanese are quick to acknowledge the debt they owe the United States in educational matters, and the influence of American teachers and of American-trained native students is evident.

Concerning the educational exhibit of France there is so much that could be said that it may perhaps be better left unsaid than to be half-said. There is no foreign educational system better known to this audience than the French, and to discuss it would be to restate what you have often read. I shall, therefore, touch only two points. In the arrangement of the exhibit space was used prodigally. It was a French exposition. The earth and the fullness thereof was theirs, and they hesitated not to make use of it. We never could learn their exact area in Group I, but it is conservative to say that it was four times as large as that of all other nations combined. In this they partially defeated their object, for it is impossible to spread a system over so great an area and have it at all comprehensive or within the grasp of the student. It wearies the sightseer also by its endless repetition. Of its excellence and thoroness there was no question, tho there was absolutely nothing new in the method of arrangement or presentation.

The other point affects the spirit of the exhibit and brings us to the radical difference between the schools of the United States and those of France, Hungary, and other nations which feel the French influence. The latter in their primary schools specialize from the earliest grades; the former educate all pupils alike till in the secondary grades. This difference is fundamental and is incident to the different theory which underlies the spirit of popular education in the Old World and the New. It is impossible with us to assign to a child of ten or twelve years of age his future occupation. To attempt to do so would be resented by the people. There is no perpetual or hereditary working class; no families identified with certain occupations. Such conditions can exist only in an old and thoroly settled civilization, where all chances of sudden wealth and preferment have been exhausted, and nothing remains for the masses but to attain the highest possible industrial skill in the arts and trades. A freedom and elasticity is demanded in the educational system of our country to correspond to the possibilities existent in our material development.

The conditions in the United States do not require, nor do our people demand, that there should be in our course of study a dominant tendency toward any particular phase of industrial progress. We have noticed the opposite in the exhibit of every other nation at Paris this summer. There is no question as to the excellence of their work. The system of manual instruction employed in the schools of France is beyond doubt brought to a higher state of perfection than in any other country. The exhibits from the *écoles primaires supérieures*, both in the Champ de Mars and the Ville de Paris building, were equal in many respects to the work of master-workmen. The only question is whether the needs of a nation justify this excessive specializing in the schools supported by public money. We are quite positive that our own social conditions do not demand it. We have our manual-training high schools and a system of manual training in many of our elementary schools, but its object is to train the senses in conjunction with the mind, but not to the exclusion of the humanities. Our industrial drawing is developed from an original system of elementary drawing, but not with the intention of making designers or artists, tho we are pleased if this may be the result. We aim to develop the imagination, to train the powers of accurate observation, and to enable the pupil to represent his conclusion both graphically and in well-chosen language.

There exist certainly radical differences in the theory underlying public education. Which will subserve better the destinies of the nation only experience can determine. It is possible that both continents have the system which their own civilization and industrial development most require.

We cannot form a just comparison of the educational systems of countries without taking into account the history of the country and the antecedents of the people. No adequate idea of Greek art and Greek literature could be obtained unless we knew the characteristics of the Greek nation, its intense love of freedom, and its passion for physical beauty and development. We must look to the traditions of the people, their historical beginnings, and the spirit of their institutions. America has been particularly fortunate in this respect. We had no legacy of ignorance and stolidity bequeathed to us from the Middle Ages. There are some advantages in being a young nation. Whatever nation of Europe you may choose for an example; whether we take France or Prussia, which for nearly a century have been engaged upon the problem of the education of the masses; or England, which has been engaged upon it a lesser time; or Russia, which is just beginning—they have had first to penetrate down thru the ignorance, superstition, and even the antipathy to culture generated by centuries of mental apathy. They have had first to awaken a responsive spirit—a problem we have escaped.

The exposition of 1900 led to the discovery of none of these things. All students of education have seen the drift of school affairs. The exposition did, however, emphasize the vital problems of our educational life by placing side by side in contrast the many systems evolved from the various relations of the governing and the governed. But the question most general in its application, which is engrossing the attention of the greatest number of countries, and which at the exposition was most diversely represented, is to what extent the social and industrial development of a nation warrants specialized training at public expense in elementary schools.

DISCUSSION—SUBJECT: SIMPLIFIED SPELLING

SHALL THE DEPARTMENT OF SUPERINTENDENCE ASK THE BOARD OF DIRECTORS OF THE NATIONAL EDUCATIONAL ASSOCIATION TO APPOINT A PERMANENT COMMISSION IN THE INTEREST OF SIMPLIFIED SPELLING AND APPROPRIATE \$1,000 A YEAR FOR FIVE YEARS, FOR ITS USE IN PROMOTING THE CAUSE?

E. O. VAILE, EDITOR OF "INTELLIGENCE," OAK PARK, ILL.

Mr. President, Ladies and Gentlemen:

It is not always that an audience has the text printed and put in its hands. But, to make sure of a full understanding in this discussion, I have had the resolution and petition printed, and I trust each of you has a copy in hand. To make sure of its meaning, let me read it with you:

Resolved, That this department respectfully presents the following petition to the Board of Directors of the National Educational Association and asks for its favorable action thereon:

To the Board of Directors of the National Educational Association:

GENTLEMEN:

WHEREAS, The twelve simplified spellings are widely used and generally legitimized because of their adoption by the National Educational Association in its late volumes of proceedings; and

WHEREAS, The National Educational Association is looked upon, and justly, as the natural and logical friend of childhood, and the indorser and promoter of all movements looking to improvement and advance in education; and

WHEREAS, There is great need, particularly in the interest of children and other learners of our language, that cohesion, organization, and standing should be given to the movement for simplifying our spelling by giving it wise, capable, and influential leadership;

Therefore, We, the Department of Superintendence, at this our annual meeting, recognizing the responsibility which rests upon the teachers of the country, as well as the opportunity now open to them, to insure the steady progress of this movement along moderate, reasonable, and practical lines, do respectfully request you to appoint the persons named below as a permanent commission in the interest of the movement toward simplifying our spelling, and to appropriate the sum of \$1,000 for each of the next five years to be used in whole or in part by said commission in such way as it may judge to be to the greatest advantage of the cause, the appointment and appropriation to be made upon the following

CONDITIONS

1. That the commission may fill all vacancies arising in its body or in its offices by a majority vote, cast by mail or otherwise, as may seem expedient, and it may elect additional members at its discretion and establish rules for its own government.

2. That the commission shall make an annual report, including an itemized statement of expenditures, to the Department of Superintendence, and also to the Board of Directors of the National Educational Association.

3. That the money appropriated for the commission shall be paid by the Treasurer of the National Educational Association upon vouchers duly signed by the president of the commission.

4. That any unused portion of the amount authorized to be expended in any one year may be used in any subsequent year.

MEMBERS OF THE COMMISSION¹

William R. Harper, president of the University of Chicago.

E. Benjamin Andrews, chancellor of the University of Nebraska.

Andrew S. Draper, president of the University of Illinois.

Dr. J. W. Stearns, professor of pedagogy, University of Wisconsin.

Dr. John Dewey, head professor of pedagogy, University of Chicago.

Ella F. Young, assistant professor of pedagogy, University of Chicago.

F. A. March, professor of comparative philology, Lafayette College, Pennsylvania.

Francis W. Parker, president of Chicago Institute.

E. G. Cooley, superintendent of schools, Chicago.

Lewis H. Jones, superintendent of schools, Cleveland.

R. G. Boone, superintendent of schools, Cincinnati.

Charles M. Jordan, superintendent of schools, Minneapolis.

Edward Brooks, superintendent of schools, Philadelphia.

J. H. Van Sickle, superintendent of schools, Baltimore.

Dr. W. H. Ward, editor of the *Independent*.

Melvil Dewey, director of the state library and home education departments of the University of the State of New York.

Henry Holt, publisher, New York.

Thomas Wentworth Higginson, Cambridge, Mass.

Benjamin E. Smith, managing editor of the *Century Dictionary*.

James MacAlister, director of the Drexel Institute, Philadelphia.

In regard to the names just read, I want it clearly understood that there is no fiction or guesswork in putting them on this list. I hold in my hand the written assent to serve on this commission, if it is appointed, of every person named excepting two. They assented orally, and are in the audience, and can speak out if I have misunderstood them.

It is probably well at the outset to guard against any misinterpretation of this petition. The proposition to appoint such a commission, and to give it money to use in its discretion in the interest of this movement to rationalize our spelling, appears to strike some as an effort to create a committee to head a raid against our orthographic absurdities, and to bombard the public with pleas and arguments for simplified spelling as vigorously each year as \$1,000 will permit.

There is no such thought or purpose behind this proposition. Does any member of this department believe that there is the slightest danger that Dr. Harper, or Dr. Draper, or Superintendent Cooley, or Dr. Dewey, or any other person named on this commission, would lend himself to an aggressive or an offensive propaganda on this subject? There is not a single zealot, or even an enthusiast, on the list.

Let me call your attention to the composition of this proposed commission: seven university men, all of them well known; seven superintendents of large systems; and seven men prominent as educators or editors, or in some other line of work. That there is only one lady in the list is no fault of mine. I wanted the women teachers well represented. I proposed to several eminent women in the best way I knew, but only one accepted. Is it possible that anyone can fear that the men named are going to put their heads together to decide what changes in spelling are desirable, and then keep dinging at their fellow-citizens to adopt these changes? Is it to be feared that they will attempt to agitate the question or to accelerate the movement already started without using good sense, without considering the danger of reaction, of creating disgust, of intensifying prejudice?

Friends have remonstrated against urging this measure on the ground that it is wise to let well enough alone; that the most dangerous thing for the reform now is to try to hurry it; that we must wait for the new spellings already inaugurated to "soak in," and take root, if you will excuse the mixed metaphor. Are not the records and the standing of the persons named ample guarantee that they understand all this? that they know enough not to make the fire too hot for the broth? For thirty-five years I have advocated the simplification of our spelling whenever fit occasion has offered. For twenty years I have used in *Intelligence* the identical spellings which this association has adopted, and I am using no more today than I did at first. Why? Simply because I have never felt that the time was ripe for me to take an additional advance step. You may be sure

¹ Consent to serve on the commission, if appointed, was received after adjournment of the department from Chauncey M. Depew, United States senator from New York, and Miss Sarah L. Arnold, supervisor of primary instruction, Boston, Mass.

I would take no hand in any scheme which might undo what I have so long labored to help to build up; in any scheme that might tend to chill the sentiment and the sympathies favorable to this movement which are just beginning to warm into life. No such purpose and no such danger lie in this proposition. The business and professional records of the men and women named in this list, their demonstrated level-headedness and good sense, are ample assurance that we shall not put the cause in jeopardy from hasty, ill-advised, or overzealous counsels by intrusting them with the leadership, while their eminence and standing will bring immense strength to the cause and guarantee moderation and wisdom in promoting it.

Every genuine schoolmaster must have Abraham Lincoln's faith in the people. When the people once fully understand the bearings of a practical question, you can safely trust their decision. The great, the essential thing is to make them understand the question. Give them light, and you need not fear the general result.

It is on this principle that I urge the appointment of this commission. One main purpose is to establish a bureau of light and publicity; to evoke a voice so clear and wise and moderate and authoritative that the people will have confidence in it and follow it.

There is need in the movement today of a nerve center, to which information and stimulus will be communicated, to be sent out again as inspiration and impulse; a central body to receive and consider all reform suggestions, to publish such as it deems wise and practicable, and thus to bring into touch with each other all the elements which favor the simplifying of our spelling.

The simple appointment and announcement of a commission composed of such scholars and leaders of thought would in itself be a most potent influence in liberating and evoking spelling-reform sympathies and developing sentiment in its support. If nothing else were done than to cause this commission, representative of the great body of teachers, to stand forth clearly before the people as both an umpire and a leader in the purposeful evolution of rational spelling, it would be well worth the money which it is proposed to spend.

Such a commission, standing as sponsor for the intelligent and reasonable and wise direction of this movement, would give character and standing to it which would be of great advantage. It would give the cause recognition as a thing feasible and desirable, and to be encouraged by all progressive social forces.

The best scholars and educators of this country, and of England, are practically a unit in believing in the simplifying of our spelling, differing only as to degree and methods. They have never taken or been encouraged to take active charge of the movement. Thru the agency of this commission scholars, educators, men of character and stability and influence, free from all suspicion of overzeal or immoderateness will have the movement in hand. The weight of their advice and influence will harmonize the divergent views as to methods of procedure and bring into unison all elements favorable to reform.

Such a commission would save the cause from its unwise friends and convince the public that there is a simplification of spelling which is moderate, feasible, and progressive, which is approved by scholars and educators, and which all sensible men and women can safely indorse and encourage.

Today there is little concert of action among the friends of simplified spelling. No supporter of the cause can learn, except by chance, of other supporters. A great many people who are really in sympathy with it take no practical steps to help it because they hear no voice of recognized wisdom and of commanding influence to lead them. There is the greatest need of a head center to which all may look for guidance and advice. To create such a committee, for wise counsel and for judicious encouragement of the movement, is the object of this effort. It would install a moderator and leader, whose moral weight and authority would hold the enthusiasts in check and attract sympathy to the cause. It would give cohesion, stability, organization, and standing to the movement.

We are all agreed that simplified spelling can and will come only as a process of development. But it will never come thru a blind, unguided, accidental, haphazard development. It will come only thru a development which is guided and conscious on somebody's part. An evolution that is intelligent and purposeful, which is directed according to the wisdom of some one, or of some many, is the only evolution, whether slow or rapid, which will ultimately give us rational spelling. So far the movement has progressed by uncertain steps, according as the suggestions of Noah Webster, or of the philological societies, or of the National Educational Association have been accepted and acted upon. But there is need of a matured plan, a far-reaching purpose, framed on moderate and intelligent lines, by which all can work who believe in the end sought. One good step has already been taken thru the initiative of this department. Sooner or later a next step must be taken, and a next, and a next, and a next, until the grand consummation is reached—simple phonetic spelling.

Now, what shall be the next step? Who shall determine it? Shall it be the change of *ph* to *f*? the reduction of double consonants to one? the omission of the final *e* when phonetically useless or misleading? What it shall be is plainly a question of mere expediency. Who shall decide it? Is the time ripe to inaugurate one or all of these changes? These questions some time must be decided. Is it wise to leave them to be brought up in this department as the spirit may move a member, and let them be decided by vote according as one influence or another happens to predominate at the moment, without reference to any comprehensive plan, and without any definite knowledge as to the ripeness of the time? To ask the question is to answer it. It would certainly be the part of wisdom to place this whole matter of controlling and promoting this movement for simplifying our spelling in the hands of a selected body of capable, trustworthy, representative, earnest men, such as are nominated in this petition.

The objections urged against adopting this petition may all be grouped under one head, viz.: it is not the function of the National Educational Association to espouse, much less to spend money on, any particular cause in regard to which any difference of opinion exists among its members. Now, I should like to know why it is not in keeping with the general purpose and character of the National Educational Association to put its immense influence and its wise directing hand behind this important movement and keep them there. It is as distinctly a movement in the interest of education as any that can be named. It is the interests of our children, not only of the present, but of innumerable generations to come, and of others who have to learn our language, which constitute the great argument in favor of this reform.

Primarily this whole question is an educational question, and if it may not properly enlist the earnest effort and sympathy of this body and of the National Educational Association in general, I do not know for what these organizations exist. The teachers of the country, represented by their superintendents, are the most logical element in the community, not only to move in this matter of simplifying spelling, as they have done, but also to see that good and wise leadership is provided and kept at the head. Is there a cause in the line of progress and reform more appropriate for the National Educational Association to foster, a cause more fit and logical for it to spend some of its money upon?

But, it is said, the superintendents are not at one on this question, nor are the great mass of teachers. So far as the mass of teachers are concerned, they are loyal to their superintendents. Let them know where the superintendents, as a body, stand on any educational question, and you will find the teachers with them. It would be deplorable and unnatural if it were not so.

So far as this body of superintendents is concerned, and also the Board of Directors, who have the final voice, the question is simply one of majority rule. Why should it not be? Did ever any great movement for the betterment of mankind command unanimous support? Is it reasonable to say that this organization should never actively support any measure upon which its members are not all agreed?

Such a principle is un-American; it is unreasonable. It would render human progress impossible. If the influence and weight of this body of educators are never cast in support of any measure until that measure has the support of all our members, the cause of human progress and improvement will never have reason to be grateful to the National Educational Association or to this department. When this body, or any other like body of sincere, earnest, but fallible human beings, becomes unanimous in support of any advance step, the evidence will be clear that the movement has got beyond the need of such support. If a majority favors this petition, the minority ought to—and they will—acquiesce. It is absurd to ask for delay until the minority approves. Let the majority rule, and don't say it would be unwise and injudicious to adopt this petition just because we are not all agreed. The affairs of this world cannot be run on the unanimity plan. In the slang of the street, the band-wagon of progress comes along, and those who refuse to jump in are left to trudge along by themselves.

Testimony and experience are all on the side of simplified spelling, both that it is feasible and that, in spite of all drawbacks, it is desirable. Not a single philologist in this country or in England can be named who is not unequivocally in favor of amending our spelling. These experts say boldly and with one voice that the science of etymology will gain more than it will lose by the adoption of phonetic spelling, and, whether this were so or not, they say, and have said for years, that our spelling can be simplified, and that it should be.

On this point of etymological or historical spelling the argument is absolutely closed, as everyone must admit who is familiar with the literature on this subject for the last thirty years. Conservatism, reverence for what is old and established, was wisely made a powerful factor in human nature. I would not show it disrespect. I only insist that on this question it shall stand squarely on its own ground; that it shall not base its opposition to change in our spelling upon any false position, but solely upon the only honest ground which is left to it, viz., that our present spelling is here, we've learned it, it is ours, it should be preserved because it is established, and on this ground any change in it must be opposed.

That plea we can all respect. It comes home to everyone of us. But is this plea sufficient, in the face of the enormous burden imposed by our present spelling upon every child and adult who has to learn to read and write English, to justify this body in refusing to indorse this movement and to give it the full and wise support proposed in the petition? My faith in the humanity and strong common-sense of our superintendents and educators makes me believe that the coming vote will show that the plea of conservatism must give way before the command of duty, the duty to let our children share in the blessings and advantages of the progress and improvement which are so marked in every other field of our modern life.

Some oppose this petition on the ground that the reform is now making progress, and that the establishment of this commission might endanger all that has been gained. I do not share any such fear. If I understand the school superintendents of this country, they believe in progress, in a wise, moderate, steady, and sound advance, in every phase of education.

The action of the National Educational Association two years ago was the first practical step in leadership of this movement by an influential body. Has not the result more than justified the courage and wisdom of this department in taking that initial step at Indianapolis, instructing the Secretary in printing its proceedings to adopt such simplified spellings as might be agreed upon by Dr. Harris, Superintendent Soldan, and Superintendent Balliet? Did any harm to the cause result from that action? Could any larger success be asked for under all the circumstances than has followed that first step? It shows what may be expected if a commission fairly representing the learning, the social weight, the business success, and the educational strength of the country should stand forth, at the command of the National Educational Association, as the avowed

sponsor and promoter, not of unwise and harmful agitation, but of sound, moderate, and practical steps; of intelligent, conservative, and matured plans and policies for nourishing spelling-reform sentiment and of helping toward the end sought. Even the publication broadcast of the names of the members of this commission as standing sponsor in a definite way for wise and sane efforts in favor of rational spelling would be a most worthy thing for this association to accomplish.

When four years ago it was proposed to introduce that first resolution in this body, the same objections were raised as now. Friends of spelling reform advised me to desist, not to introduce the resolution. It would stir up a muss. It would do no good. It would be defeated. I would hurt the cause. Only one man knows how near that resolution, after being prepared, came to going into the hotel grate that February morning in 1897. It was an anxious time until by an unquestioned majority the resolution was passed and the committee was appointed. If the counsel which is so determined now had prevailed then, nothing would have been done and the encouraging progress of the last four years would not have taken place.

It is not pleasant to persist in presenting and urging this matter in the face of the opposition arrayed against it. But I believe it is the duty of this body, which it owes to itself and to the children, to take hold of this movement and give it character, and standing, and intelligent and wise direction.

Objection is made to spending the money of the association for such a purpose. Why? The association has a fund of nearly \$90,000. What was it raised for? Who will tell? It has come into the treasury from membership fees without any specific purpose. Each one has done his share in accumulating it. I think no one will question that I have done mine. What member or set of members have a right to set up their authority and pronounce this proposed appropriation as an illegitimate use or waste of the association's funds? Clearly that money is eligible for any use which is germane to the grand purpose of this organization. What is that purpose? The preamble to our constitution distinctly declares that object to be (I quote the words) "to promote the cause of popular education in the United States." Can any proposition now before the public be named which, if adopted, would do as much, or a tenth part as much, "to promote the cause of popular education" as the simplifying of our spelling, making it consistent and rational? Every man and woman here knows that, simple and easy to learn as is our English speech, the language that we speak with the voice, our irregular and illogical spelling is a very serious and wholly needless hindrance in the way of every child or adult who undertakes to learn to read and write it. There is no educational reform or improvement that, in helpfulness for the young and in easing the process of primary education, can be compared for a moment with the rationalizing of our spelling. The National Educational Association has never spent a dollar which was spent more wisely and legitimately than would be the money asked for in this petition. There is no cause now ripe for the attention of this department and of the National Educational Association upon which the small amount of money named could be spent more judiciously and effectively.

But what will the commission want money for? is asked. Consider that the men and women who have consented to act on this commission, if it is appointed, are, every one of them, busy to the last degree with the affairs of their own office or business. If this commission is appointed, it will find work to do, you may be sure. In the nature of the case, this work will have to be done largely by correspondence. Can these members be asked to pay their own postage and stationery? So, to start with, there is stationery to be provided, and printing, and a competent stenographer-clerk to work under the president's direction. There must be conferences and reports, etc. The sum named is very small in comparison with the work which will develop. But there is ground for hope that after the commission once gets to work, and its beneficent object becomes understood by our philanthropic millionaires, funds will come to it sufficient to enable it

to carry on its work efficiently. Certainly no one fears that any money appropriated for the use of this commission will be spent in junketing, or wasted in any way.

In conclusion, and as a general answer to all fears and objections, let me call attention to the fact that the petition to the Board of Directors does not commit the association or the commission to any particular policy or opinion whatever in regard to spelling reform or its promotion. Everything is left absolutely to the discretion of the commission. In my correspondence with them this point was made very plain. If a majority of its members should share the fear of some of our friends that any proposition for even gentle agitation now would jeopardize what has already been gained, the commission could so announce, and matters would undoubtedly remain as they are. No reformer would be so foolish as to think of urging steps which a committee of such men would not approve. If the committee should deem it best for the present to do no more than discreetly to encourage and promote the use of the changes now before the public, for one I should think it wise. In this one particular alone the commission could do very effective service for many months.

These gentlemen are nominated as known and avowed friends to the cause of simplifying our spelling, with the expectation and understanding that they will advise and take such steps only as they think wise. If their judgment is against agitation or any other step, they will act accordingly. If they deem it wise to agitate the matter in any way, it will be their duty, and they will be expected to do so. Is there any superintendent who cannot absolutely trust such a set of men to handle this question, or who cannot agree to follow their leadership?

I move the adoption of the resolution and the petition.

JOHN MACDONALD, editor of *Western School Journal*, Topeka, Kan.—We read that "in the beginning it was said, 'Let there be light,' and there was light." A few of the brethren met in Washington in 1898 and said, "Let there be orthography," and there was orthography. By a vote of eighteen to seventeen, at a meeting of the Board of Directors, eighteen men undertook to say to 150,000,000 people how they should spell twelve English words. What effect has that attempt had upon the English-speaking world? What effect has it had upon 76,000,000 of people in the United States? What effect upon the American press? The main effects seem to have been that the reform is supported by two or three educational journals. Our reforming brethren might say to the people of the United States, in the language of the Scripture: "We have piped unto you, but ye have not danced."

Now it is proposed to carry the reform still farther thru the agency of a committee of prominent educators. We might meet that by saying that "great men are not always wise, neither do the aged understand judgment."

It is easy to say from this platform that all the philologists are in favor of the spelling-reform movement, but it ought to be noted that not a single name has been given here this morning as favoring it.

English orthography is assuredly the most rugged in the world, but it is the outcome of the ruggedness, character, and characteristics of the English-speaking people. I maintain that there is no demand for a reform of this kind. I am opposed to depredations on the English language and hope the depredators, like him we read of in the sacred writings, may soon be "clothed and in their right minds."

PRINCIPAL E. B. PRETTYMAN, of Maryland.—Every time I have seen any of the twelve amended spellings in educational journals I have been greatly annoyed. The spelling of the English language has gone on to change in a natural way. It came about thru one plain, natural law—the law of the best usage. There have been many changes since Chaucer's time, and these have come about thru the operation of this law of usage. Many changes were suggested in earlier editions of *Webster's Dictionary*, but they were not all accepted by scholars. Many were ignored by literary men and scholars, and so were finally abandoned.

We are a great people, but we are not prepared to ignore, or to propose for reform, what the great men of England regard as good English speech. I say: Let well enough alone. Let the law work out the changes surely and beautifully, as it will do. The old rule of the best usage should continue to prevail just as it has done.

PRESIDENT F. W. PARKER, Chicago Institute.—The evidence on this question is all in, and the ridicule as well, and it is all on one side—all on the side of the child. The children should learn to read and express thought without the handicap of the abomination of desolation of our unphonetic language.

The manner of spelling words is simply fashion. Fashion changes, and why should not fashion in spelling change? This is a question of intelligent education. Thousands of dollars are spent necessarily every year in teaching children how to spell anomalous words. Think of the waste of time! Ask the teachers and they say: "We must spend time on spelling which we should devote to more important things, as geography, history, literature." There is no argument against this movement except tradition. What would it give us? O think what it would give us in the first three years! Give the children release from bondage! Think of the millions who are to learn to spell the English language—the people of our new possessions! Think of the difficulties they will confront in acquiring a mastery of our wretched orthography! What arguments are made against this reform? Just the argument that it is wise to stand by the old. We must bring the force of this higher educational power to bear upon this question. If we do not save the children, who will?

SLOSSON THOMPSON, of the Chicago *Times-Herald*.—*Mr. Chairman*: So long as the advocates of the disfigurement of the English language confined their efforts to printing their appeals in such magazines and periodicals as had space to waste on a futile kicking against the prickles of learning, there was no need for anyone to take up the cudgels in behalf of his mother-tongue. Adopting the lofty style of the only truly great lexicographer: "Sir, the orthography of the English language needs no defense." It stands, what it is, glorious and unapproachable in its incongruity, matchless in the potency and picturesqueness of its irregularities. I revere it for its unmastered difficulties, its verbal snares and pitfalls, its inexplicable spelling, and its sweet unreasonableness. I love it for the enemies it has made—and overwhelmed.

English is not a perfect language. Heaven preserve it from the canker of perfection! The perfect languages are all dead. Regularity and reforms killed them. The irregular, unscientific English has outstripped every other living language. It has strangled Volapük, the ideal language of the spelling reformers, in its cradle.

But when the spelling reformers ask a representative body like this to expend \$5,000 upon an undertaking to which the knight-errantry of Don Quixote was sanity, it is time the common-sense of the English-speaking multitude was heard in protest. By the way, how would the spelling reformers spell Don Quixote?

I would be the last man to rob Mr. Vaile of his rattle. Let him play with it. But when he asks a body of men devoted to teaching the English language to appropriate money to introduce scientific confusion of tongues into their teaching, I submit that he is trespassing on hallowed grounds. If Mr. Vaile were an arboriculturist as he is a verbaliculturist, he would prune the beauties out of our forests, he would trim the maple and oak leaves of their distinctive glories, pluck the odd leaf from the clover and shamrock, and put every trunk, limb, and branch of nature into a plaster cast.

I suppose if educated Chicago were canvassed for the one man who by inveterate instinct and perverse practice spells English most incorrectly at every opportunity, and makes opportunities where they do not occur, I should have been its first choice. For twenty-seven years of daily newspaper work my spelling has been the despair of typesetters in three cities. But in all that time—blundering along, strewing my way with the fragments of the late queen's English—will you believe it, I cannot remember now to

have misspelled a single one of the words which our good friends, the reformers, would mutilate, dismember, and disembowel, to make them easier to spell and shorter to write. What does this mean? It would seem to mean that they are crying "Reform, reform!" where there is no demand or need for reform. Have you ever stopped to consider the task of Sisypheus these spelling reformers have set themselves? You might as well attempt to bail Lake Michigan with a gill dipper as to try to reform the English language by dropping a few letters out of two score words in it.

The attempt is as preposterous as it is unnecessary. Let us consider the English tongue, which today is the noblest heritage of over 130,000,000 people. It is the most wonderful conglomeration that was ever evolved from the confusion that befell the builders of the tower of Babel. The mixture of blood in the race that is being assimilated in the schools and workshops of this land comes from a few sources compared with the multiplicity of sources from which the spoken and written language of that race is derived. The language is so tenacious of what it has once fairly taken into its maw that it is not safe to write "obsolete" against any word once in familiar use. Naturally a language so varied in its derivation, so flexible in its structure, so irregular and inexplicable in its idioms, abounds in words and phrases that are the joy of its possessors and the despair of philologists and professors. The latter have been trying to reform the life and letters out of the English tongue ever since it was recognized as such. It has never suited the scientific grammarians and philosophers.

How do you explain the phenomenon that you cannot find a master of the English language in the ranks of the spelling reformers? Scores of philologists rail against it; not one great writer complains. I account for it on the theory that the good workman seldom finds fault with his tools. From Chaucer, an infamous speller, and Shakespeare, who could not spell his own name twice alike consecutively, and Milton, who could not see whether his daughter spelled "though" with a silent terminal or not, down to Rudyard Kipling and Robert Louis Stevenson, who ever heard a great writer thinking or caring whether his printer spelled "program" in long or short meter?

But there is a serious side to this subject which the spelling reformers in their personal arrogance might well pause to consider. What right have they, in order to effect what must be at best a questionable reform, to attempt to break down the uniformity of printed English literature? What compensation do they offer for the confusion of spelling which they would introduce into the books of 130,000,000 people? I am inclined to say: Blessed are the dead languages, for their reformers are also dead. They at least are beyond the reach of the pride of personal conceit that would advocate lighting daylight with electricity because the sunlight causes a few weak eyes to blink.

We who have lived long enough to observe the effect have seen no compensating advantage from the reform in spelling words like "honor," "labor," etc., without the *u*. For many years its sole result was the difference between the typography of books printed in England and America. There is a disposition now to revert to the original form in books printed for sale in both countries. Philology and reason were behind the change, but the genius of our glorious language revolts at reason and resents any reform that robs it of any of its idiosyncrasies.

Do you want to know why the work of spelling reformers will prove vain? It robs the printed language of ingrain dignity of form, and gives to it the ludicrous appearance of a stump-tailed fox. In the current phrase of the street, the spelling reformer makes good old English words like "though," "through," "thought," and even the Greek derivative "programme," look like "thirty cents." There is a beauty in the mere form of old familiar words that should be sacred from the reforming iconoclast. Language is a growth which no art can improve upon. The philologists have never added a single familiar word to the language. Why should they be permitted to "monkey" with it?

What the varied forms of molding, pillars, windows, arches, caps, and cornices, and above all proportion, are to architecture, the forms of certain words have become to

printed English. Let me illustrate. You all know the thirteenth chapter of First Corinthians :

1. Though I speak with the tongues of men and of angels, and have not charity, I am become as sounding brass or a tinkling cymbal.
2. And though I have the gift of prophecy, and understand all mysteries, and all knowledge ; and though I have all faith, so that I could remove mountains, and have not charity, I am nothing.
3. And though I bestow all my goods to feed the poor, and though I give my body to be burned, and have not charity, it profiteth me nothing.

I need read no more. You know how disastrous has been the attempt to substitute the word "love" for "charity" in this passage. Let the reformers have their way with spelling the word "though," let them spell "prophecy" with an *f*, and the offense to the eye would be almost as great as was revision of "charity" to the ear and heart of every lover of English literature.

The spelling reformers of today have not the plea of discovery or invention to offer for their crusade. Artemus Ward, Orphus C. Kerr, Josh Billings, and Petroleum B. Nasby took phonetic liberties with the English tongue, besides which their tentative reforms are like glow-worms to the blazing sun. These truly clever professors of sloth and illiteracy had the courage of their calling. They knew that the road to literary fame and fortune by the beaten road of original thought and verbal distinction was a long and hard one to travel. They realized that bad spelling was the protest of the multitude against the superior attainments of the industrious few, and therefore they adopted the system of our friends, the spelling reformers, as their short-cut to the hearts and dollars of their countrymen.

But do not conclude that A. Ward, Office Seeker, Billings, and Nasby were the original spelling reformers. The species has flourished in every age, since illiteracy provided an easy and humorous foil to learning. Shakespeare and the dramatists of his time showed themselves masters of the phonetic trick three hundred years before Artemus Ward convulsed two nations by spelling "before" with a letter and a figure. What we need is not a reform in the spelling of the English tongue, but a reaction against the ghastly failure to teach spelling in our schools at all. I was going to say a reform in the method of teaching spelling in our schools. But, thanks to the professors, they have no methods. Our children are no longer taught to spell. They visualize words. That is to say, they do not spell cat *c-a-t*, or dog *d-o-g*. They see the word written on the blackboard, and are told to associate it with the animal it represents. Of course, there is not the faintest suggestion of a dog or a cat in the form of the written word. So when your daughter comes to write "the cat killed the rat," you are in luck if she does not write, "the cow licked the can." When this visualization gets beyond simple objects it is necessarily absolutely and hopelessly at sea. Last summer my little girl of nine years, writing from the Massachusetts coast, wrote, "the tid was firy lo," and also that "the water was firy kol." She had her own system of phonetic spelling. She composes with natural facility, and her letters are a joy to all her grown-up correspondents. But they are making her mother gray before her time.

Now, spelling, as taught in our public schools, is an attempt to revert to the Egyptian system of hieroglyphics. It would make bricks without straw—words without letters. It does not make each word consist of so many movable characters, but seeks to make each word a symbol. In this way our children are being taught by the Chinese method which requires a sign for every word. A printing establishment in China has to have fonts containing thousands of separate and distinct characters, where the American compositor can set up hundreds of thousands of words from a single font of type containing only the twenty-six letters of the alphabet. This is the system which the visualists are forcing upon the innocent but doomed children of Chicago. They are seeking to make them fill their little minds with the association of ideas between printed words and myriads of objects, or ideas, for which they stand.

Let me put this indictment of a monstrous system more plainly. Spelling by the visualizing method requires the child to identify arbitrary signs for innumerable things.

Spelling by the system of our fathers required us to know only twenty-six arbitrary signs by which we can construct the names of everything in heaven above and in earth beneath and in the water under the earth.

Professor Clark, of the Northwestern University, recently gave an account of the failure of a class of 191 to pass an examination in spelling 150 ordinary words. He produced the list in proof that the words were in ordinary use. I have tried it on several of my acquaintances of the generation which learned spelling and also definition from the old-fashioned spelling-book. Not one of them stumbled over more than five words, and one of these was "Philippine," which is a trick word. And yet 153 of that class of 191 fresh from their studies failed to pass the examination, notwithstanding there was an allowance of twenty errors per paper. One of the graduates of the modern system of spelling without letters incorrectly "visualized" 77 words out of 150. The man who first invented and went about advising "visualization" ought to be indicted for larceny of the first principle of education. Verbal and literal iteration—that alone can store the memory with indelible and instantly available impressions.

But, gentlemen, spelling reformers are humbugs. What they propose is not reform. It is mere freak abbreviation. Take, for instance, the twelve words which the National Educational Association indorsed as a feeler three years ago: program, tho, altho, thoro, thorofare, thru, thruout, catalog, prolog, decalog, demagog, pedagog.

There is not an idea of reform or genuine simplification in one of these. Many of them have been used time out of mind with the apostrophe. The reformers are fond of telling the story of the man who said he never really understood the meanness of the term "demagogue" until he saw it spelled without the final *ue*. That man had a latent sense of the true dignity of words, and the reformer who first invented the story was so intent on his little point that he did not appreciate how the same abbreviation in spelling made *catalog*, *prolog*, *decalog*, and *pedagog* look like so many bumps on a log, or, to speak more accurately, like so many kites without tails. They are rudderless words, without pride of ancestry or dignity of form. In at least two of the words mentioned above the reformers have not followed their own pretense of spelling phonetically, since *th-o-r-o* does not spell *thorough*, and *th-o-r-o-f-a-r-e* does not spell *thoroughfare*.

But what impression has spelling reform made on English during the past twenty years? I leave it to you to say whether you believe the dent is any deeper now than it was when that March hare from Lafayette started the raid to make a printed page of English look like a bad case of delirium tremens superinduced by an overdose of gin fizzes of Efs and Jays and Zees.

Today, thank heaven, the English language is flourishing like an ever-green bay tree. The new *International Dictionary*, made necessary after only ten years since the preceding revision, claims to have 25,000 additional words. It is still the standard American dictionary in court and counting-room. It still adheres to the correct principle of dictionary-making, and gives the language as it is, and not as this or that spelling deformer would make it.

To teach the language as it is, I take it, is the simple, plain duty of the public schools of America. No matter how we may individually think it should be spelled, we must accept spelling, backed as it is by tradition, by growth, by history, by etymology, and by the printed literature of the two great branches of the Anglo-Saxon race in a multitude of books no man can number. It is downright profanation to think of making old junk of printed English books since the days of Edmund Spenser.

We must adhere to a single common standard in spelling as in money and morals. It is your duty to set your faces like flint against the attempt to scatter the seeds of confusion in the spelling-books of the republic. Reform the methods of teaching spelling;

they cry aloud for your immediate and prayerful attention; but say "hands off" the universally accepted spelling of English.

My last word to you, whether it refer to reading, writing, ciphering, or spelling, is to stand fast by the old ways which have never failed, and to shun new and scientific nostrums in education as you would the foul fiend who would lead the children committed to you thru flowery fields of dalliance to ignorance and destruction. Mere memory without understanding is nought. But understanding without a more or less full and accurately stored memory is ignorance.

As for the English language—it is all right. By reason of its strength, its flexibility, its directness, its copiousness, its nobility, and its irregularity, it stands without a peer among the languages of the living. It has a literature that not only surpasses the literature of any other language living or dead, but it surpasses them all, for it practically comprehends them all. The work of the philologist is to trace the ancestry of words back to their roots. It has never given a single green twig or shoot to language. It multiplies books and not literature.

Skeats, the greatest of the philologists, acknowledges that "the speech of man is in fact influenced by physical laws, or, in other words, by the working of divine power." I know not how that may be, but, tho doubtless the philologists and spelling reformers might have produced a better language than English, doubtless they never have and never will.

SUPERINTENDENT JOSEPH CARTER, Champaign, Ill.—The power of the English language lies in the thought and the ease of its utterance, and not in its execrable orthography. It is because of the tongue, not because of the monstrosities of the spelling, that it is a powerful instrument. I have had difficulty with spelling so much that I have had to carry a dictionary in my satchel for recourse in my correspondence. I have had to waste time and life because of this difficulty. I have spent more time in learning to spell than I have to get rich. We *do* have the pupils visualize—but we also have them spell in the old-fashioned way. We do not know how many are killed in going thru the trying ordeal of learning to spell, but we want to spare the killing of the millions who are coming.

We must think of the children. We are not thinking of what the editors say. We must think of relieving the children of the drudgery of mastering this spelling. This reform would save the children so much that we must urge it.

DR. E. E. WHITE.—There should be a complete separation of this question. The question of spelling reform and the proposition to appoint a commission by the National Educational Association for the furtherance of that reform are two very different questions; the second is the real question before us.

Spelling reform has been a disappointment to its friends. It has gone on very slowly. Notwithstanding the approval of it on the part of philologists and philological societies, they have not shown zeal enough to put their hands in their pockets to give it substantial support. What does this mean, if not that they do not see how it can be effected? There is evidently little faith in its triumph.

The Board of Directors of the National Educational Association at Washington in 1898 by a vote of eighteen to seventeen authorized a change in the spelling of twelve words in the printed proceedings of this department. This action was heralded as the action of the National Educational Association. The question was never before that body, and the Board of Directors had no authority to speak for the association on such a question. Its action was limited to the publishing of its proceedings.

We are asked to take this action in behalf of the children, but in their interest I object to such an increase in the spelling burden. The children are not to be helped by a change in our orthography, for a change in the spelling of 40 to 100 words will add that many additional new spellings for the children of this and the next generation to learn.

Even the teachers must know the standard spelling as well as the new, especially when they come to make application for places. Every new spelling authorized adds to the task of learning to spell, and so the burden is not to be lifted in this way. The children are obliged to learn to spell English words as they are now written. It will take one hundred years to change the spelling of as many words, so that the new spelling will take the place of the old in English literature.

This is not a proper work for this association. It is not its function. Spelling reform is not a definite and clear means of promoting popular education, as already shown. This National Educational Association should be kept free from the responsibility and annoyance of a commission reporting changes in spelling from year to year. The funds of the association should not be used to promote such a reform. Let it be left to the philological and spelling-reform societies in this country and Great Britain.

SUPERINTENDENT L. H. JONES, Cleveland, O. — My name was placed on this committee with my consent, but I came to this meeting with no enthusiasm for this movement. Since hearing the lack of argument upon the other side, I am heartily in favor of it.

SUPERINTENDENT CHARLES R. SKINNER, Albany, N. Y. — At the Washington meeting, when this question came up, I was one of the seventeen to vote against the reform. I am still opposed to it. An arithmetician has figured out that it would take 25,000 years to bring about the assimilation of the twelve amended spellings into our language.

DR. WILLIAM T. HARRIS, United States Commissioner of Education.¹ — One of the gentlemen who have spoken this morning has stated that the spelling reform dates back twenty-five or thirty years in this country. He refers to the movement as initiated by the action of the Philological Association of Great Britain and the indorsement of its action by the Philological Association in America — the spelling reform itself is twice as old. It originated chiefly in the work of Alexander J. Ellis, who was a scholar of Trinity College in Cambridge in the thirties and forties of the last century. It was his sound advice and deep skill in phonetics that Isaac Pitman made use of in the invention of phonography — the first great system of shorthand writing, which has come into use among the reporters of the English language everywhere. Mr. Ellis was greatly interested in discovering the history of the changes in pronunciation in the English language, and he saw quite clearly that if the nation used a phonetic alphabet it would photograph from one generation to another the status of pronunciation and enable the future scholar to trace the laws of change which prevail in orthoepy. Some time between 1840 and 1850 Mr. Ellis published a pamphlet under the title of *A Plea for Phonotypy*, by far the ablest document that has urged a reform in spelling of the English language. Mr. Ellis' final great work in his specialty, which has assisted the students of English more than any other great work ever written, is a treatise on early English pronunciation, with a special reference to Shakespeare and Chaucer. The five volumes of this remarkable work bring together into one focus nearly all that has ever been taught or written that will throw any light on the ancient pronunciation and its progressive changes. The first volume of this work did not appear before 1869.

The great scholars, such as Sweet, now professor in Oxford and author of many books on the dialectic varieties of English; Alexander Melville Bell, the author of *Visible Speech* and another able advocate of reformed spelling, who attempted to form an alphabet of signs which suggest in themselves the vocal organs used in the utterance of the sounds represented, whose alphabet, slightly modified, has been adopted by Sweet and is used in all the universities where a scientific study is made of the elementary sounds of languages

¹ Revised and extended by the author.

and their alphabetical representation; J. A. H. Murray, of Oxford University, the editor of the great dictionary of the English language, and indeed the great dictionary of the world, for that matter, because it contains the results of the labors of three thousand English scholars who have divided up the literature of the language and read all of its classical writings and brought together their results in such a way as to show the history of the first appearance and all subsequent changes of each word in the language; these men and their disciples all gladly acknowledge a great debt to Alexander J. Ellis.

Speaking of the date of the beginning of the spelling reform, upon reflection I see that it is fully fifty years since I began to be interested in it, having in 1851, thru the study of phonography, become interested, also in phonotypy thru A. J. Ellis' plea for it. I had great hopes from 1850 up to the time of our Civil War to see a general adoption of a reformed alphabet, each letter of which should represent only one sound, and which should contain a character for each sound in the English language.

I have learned much since then, and know how difficult it is to make a change in any institution or usage which affects the population as a whole. I might add that the Anglo-Saxon population is the most conservative of all populations, because the genius of its government is that of compromise and that of foundation upon established usage without reference to logical arrangement or complete reasonableness. The constitution of Great Britain is a collection of established usages, each one representing the result at which two opposing parties compromised their extreme views and adopted a mixed view, not quite one thing or quite the other. It is not a theoretical constitution reasoned out and adopted by a people, but only a system of special rights and privileges fixed by compromise between two stubborn opposing interests.

It is clear that a people whose local self-government depends upon the sacred observance of laws more or less irrational and contradictory, and made harmonious only by hundreds of years of supreme (or highest) court decisions, has acquired the habit of mind of respecting peculiarities of all kinds, not merely of law, but also of personal habits, and also of methods of writing and spelling the words of one's language.

The philologists have long since proved that the peculiarities of English spelling do more to mislead than to aid one who investigates the derivation of words. The difficulties in the English spelling trace back to the patchwork of the Norman scribes, and then later on to the whimsical ignorance of men in the time of Samuel Johnson, who supposed that they knew the etymology of the words that they were using, but were mistaken, as scholars had been in the case of the word *island*, which in the sixteenth century (a century before Johnson) began to be spelled with an *s*, on the theory that it was derived from the Latin word *insula*, and that it was a compound word containing the French word *île* or *isle* and *land*, whereas the old middle English word *iland* or *ealand* was composed of the word *land* and the prefix *ea*, signifying "water" or "river."

Murray's English dictionary enables each student to find the results of the history of English words, both as to pronunciation and derivation, arranged conveniently under each word. I remember my astonishment year before last when I found in one of the works of Professor Sweet the fact stated that the common pronunciation of the word *children* is *chooldren*, the *ild* being pronounced as if spelled with the *oo* sounded as in the word "foot." I was astonished at this, because this was in my youth the general pronunciation among the farmers of New England. It seems that their ancestors had brought this pronunciation from England, and that it still exists as common among the English dialects.

The past summer I was traveling in Suffolk, in a part of England belonging with Norfolk to East Anglia. It was the place that sent most immigrants to Massachusetts from 1630 to 1680. I was surprised to find my Connecticut pronunciation of *u* after *r* still in use among the common people in that part of the country south of Norwich and not far from Ipswich. As a boy I pronounced *true* and *fruit*, not with the sound of *oo* as in "food," but with the sound of *u* as in "pew," "endure," "sue." Long ago I

had been taught by teachers to change my pronunciation, but I remember once when visiting Harvard College making the observation that the majority of the tutors and under-professors, who came from the rural regions of New England and were not born in Boston, pronounced in conversation the *u*-sound in such words as "truth," not as *oo* in "soon," but as a diphthong or glide from the sound of *i* in "it" to the sound of *oo* in "foot," just as I did.

In my visit to Suffolk county last summer I learned the reason for it. The people of the rural regions of a country retain from one generation to another, without much change, the pronunciation of their forefathers. Whereas the prevailing English uses a *y*-sound with an *oo*-sound following it, pronouncing "due" almost as if it was spelled *joo*, yet in East Anglia and wherever in America the population is from rural New England this *ew*-sound of *u* is preserved, notwithstanding the fight of the teacher against this usage.

I have repeated these trifling circumstances in order to indicate the direction in which the labor of the English philologists who favor spelling reform is of great service in throwing light upon the English speech as it is written and spoken. I always wish to say a word for the great dictionary of Murray, which gives to our scholars, and to the scholars of every remote country where English is spoken, the ability to see as in a mirror the English language in its entire history.

I have gone into these particulars also in order to intimate, in what I trust is a polite and acceptable manner, that those who object to spelling reform from a scholarly standpoint may be justly charged with some defect in their scholarship, and that they do not know the present situation of English philology.

I do not hesitate to repeat on all occasions that I am, and have been, a believer in the desirability of effecting a reform in the spelling of English. But I do not believe that this can be done by the intense zeal of a few individuals, or even of a considerable class of people, such, for instance, as compose this association. I do believe that the unreasonable conservatism which widely prevails among the opponents of spelling reform can be undermined only by a gradual process, and that this association, in adopting a dozen simplified spellings, has taken a wise measure. Once habituated to the idea of reforming or simplifying our spelling, the mass of the population in the next generation will be ready to make radical changes, whereas, if radical changes are attempted now, the conservative people will combine in self-defense, and shut the door against any semblance of change. This is a case where a thin wedge is needed, and where it is wisest to make as little agitation as possible. Hence, when my committee recommended, a couple of years ago, the list of twelve words—which, by the way, I obtained from my friend, Mr. Vaile—we hoped that the changes would be used in the publication of the proceedings of this association, and that as little as possible would be said about it. We did not approve of Secretary Shepard's action in printing the list of words and sending it out to the public press thru the country, because we knew that it would cause a reaction. At the Washington meeting we had a fight in the Board of Directors over the rule, and it was confirmed, as has already been stated here, by a vote of eighteen to seventeen. I shall not be surprised at all if a vote next summer reverses the whole matter by a vote of two to one. We thought, however, that we could hold the thin wedge where it is, if we said as little about it as possible and fought for the retention of the small list of words that we had simplified. The next generation will become familiar with the work of simplifying the alphabet, and will demand and secure radical reforms; at least this is what we hope.

But we must not forget, any of us, that this is a National Educational Association, and that spelling reform, or temperance reform, or religious reform, or moral reform, is not the special object of this association. Our object is reform in school methods, namely, methods of instruction, methods of discipline, methods of organization, and methods of management. If our association becomes a spelling-reform association, another one specially devoted to school reform will become necessary. I am not in

favor even of the thin wedge which we adopted two years ago, if that is to be a cause of new struggles and ever-recurring discussions of the subject.

I have already presented my views in correspondence with my friend, Mr. Vaile, on this point. I honor and respect Mr. Vaile for his unselfish and persistent advocacy of the spelling reform, but I certainly think that his movement is ill-timed and worse than useless as an aid or help to spelling reform. It will produce reaction and stir up feelings and sentiments in the matter where we ought to have only clear reasons and a judicial frame of mind. I am therefore opposed to the resolutions which he offers in detail and as a whole.

Mr. Vaile and Colonel Parker have stated here that this reform is entirely in the line with the regular work of this association, but they do not show how it is related to the work of instruction or the work of discipline, or of organization and management. They certainly would not suppose that the teacher can introduce spelling reform into his school without the permission of his school committee, or that the school committee can do it without the countenance and support of the entire English-speaking people. It cannot, therefore, be a matter which relates directly to education in the schools. It can in no sense be accomplished by a few individuals, or even by a large association. One cannot take up this reform and carry it on alone. By attempting to do this he will simply make himself disagreeable to his fellow-men. He will be disagreeable because he will neglect the concrete and manifold interests of society and thrust unduly forward one simple interest, one reform out of an infinite number of possible reforms which ought to be secured. The spelling reform is, therefore, not a reform which can be secured by this National Educational Association, and those who favor the adoption of the resolution in question will, if successful, simply turn the work of the association out of its regular course into that of a spelling-reform association, and will divide the members of our association into two opposing camps on a question which does not relate directly or indirectly to instruction or discipline in the schools.

MR. VAILE, in closing the discussion,¹ regretted that the responsibility of the closing address did not rest on other and abler shoulders, especially as he had to oppose his friend, Dr. Harris, with whom now for the first time in his life he found himself in opposition. He was astonished at Dr. Harris' attitude on the matter under debate. He recognized the doctor's great influence in the association, but he hoped that at least the younger men would be independent and vote according to their own judgment. Then, directly addressing Mr. Thompson, Mr. Vaile said: I understand you, sir, to say in effect that a master of the English language cannot be found in the ranks of spelling reformers. Did I correctly understand you? (The gentleman arose from his seat and admitted that he had so stated.)

MR. VAILE.—Do you admit that Alfred Tennyson was a master of the English language or contributed anything of value to English literature?

MR. THOMPSON.—Why, yes.

MR. VAILE.—Mr. Tennyson was a vice-president of an English spelling-reform association. Do you admit that Charles Darwin was a master of English or contributed anything of value to literature?

MR. THOMPSON.—Yes, to the literature of science.

MR. VAILE.—Very well. Mr. Darwin was also a vice-president of an English spelling-reform association. Do you admit that William Dean Howells ever contributed anything of value to English literature?

MR. THOMPSON.—I should like to discuss Howells with you.

MR. VAILE.—That is neither here nor there. What do you answer to the question? Mr. Howells is, or at least was a few years ago, a vice-president of a spelling-reform league in the city of New York, and felt inclined to accept a place on the commission

¹ Revised and extended by the author upon receipt of a copy of the foregoing discussion.

named in this petition, but finally decided that he could not. Brander Matthews and Edward Eggleston are, or were, vice-presidents of that same New York spelling-reform society. The gentleman can hardly help allowing some mastery of English to William E. Gladstone, Herbert Spencer, and Charles Sumner. Every one of these men, not to mention others of eminence, is on record as an outspoken believer in spelling reform.

Dr. White wants to know why I and other advocates of phonetic spelling do not adopt it. Look at the unfairness of the argument. I am dependent, like every other publisher or editor, upon my business for my living. I believe thoroly in simplified spelling for the sake of the children and the teachers. I use as much of it now, and have for years, as I dare to in my papers. Is it fair to ask me to run my head against the wall of prejudice on this subject which still exists, and which Dr. White personally exhibits and encourages, and thus to deprive myself and family of bread and butter? Is it just, is it reasonable, for Dr. White to raise such an argument against this movement? He finds fault with the philologists because they do not push the reform themselves. The philologists are active in supporting the cause of simplified spelling. Max Müller declared his conviction that it is the duty of scholars and philosophers not to shrink from holding and expressing what men of the world call Quixotic opinions on this subject. He says: "I feel convinced that practical reformers should never slumber nor sleep. They should repeat the same thing over and over again, undismayed by indifference, ridicule, contempt, and all the other weapons which the lazy world knows so well how to employ against those who venture to disturb its peace."

The literature of the last thirty years shows that philologists have done their duty in this direction.

The charge has been made that reformed spelling is losing ground; that reversion to former spellings is taking place. That is a mistake. A few publishers are so eager to cultivate a market for their books in Canada and England that they ignore the American public and American preference in this matter, and cater to British prejudice. Think of it! The irony of it! Dr. Harris, a devoted and lifelong advocate of simplified spelling, is compelled by the publishers of the excellent "International Education" series, of which he is the editor, to put the long-discarded *w* back into "color," "favor," etc. There is no reaction against simplifying our spelling. It is only the work of two American publishers who are willing for a very slight and doubtful compensation to take a backward step at the expense, so far as their influence goes, of the American people and of American children.

Dr. Harris maintains that this is not a proper matter for this department or for the National Educational Association to take hold of; that it is not an educational question; that it is merely a side issue. If the removal of obstacles and hindrances from the pathway of the children in learning to read is not an educational question in the broad sense, what is it? If it does not tend "to promote the cause of popular education"—the very purpose of the National Educational Association, as declared in its constitution—what would promote that end? For Dr. Harris to take such a position is inexplicable. He holds the office of Commissioner of Education of the United States. As such he disburses a certain amount of the nation's money, and for what purpose? What is the object of his office? Clearly it is to promote popular education, the same as the declared object of this association. Has Dr. Harris the right to use his office or the money of his bureau for any other purpose? Clearly he has not. And yet, among the "Circulars of Information" which he issues as Commissioner of Education is a large and most excellent pamphlet on reformed spelling. If the simplifying of spelling is not an educational question, if in itself it does not promote popular education, what right has Dr. Harris to spend the money of his bureau in getting out such a pamphlet? I might just as fairly censure him for abusing his office and misusing public funds as for him to stand on this platform and condemn my proposition as an illegitimate matter for this organization to take hold of and encourage.

Nobody wants to see this association become a spelling-reform society, and there is no danger of its becoming such. But this association owes it to itself and to the children of this and all coming generations to do what it can consistently to encourage and promote the simplification of our spelling. In the way I propose it can exert its powerful influence and not divert itself in the least from its true function.

Dr. Harris digs deep, in his usual way, to find in the peculiarities of Anglo-Saxon character a powerful reason why prejudice against changing and simplifying our spelling must be respected. He overlooks two important points: (1) While the Anglo-Saxon is conservative, he respects consistency and right; he is resolute and determined when his face is once set, whether toward reform or any other goal; he is quick to adjust himself to new conditions when he sees their advantage. The progress and improvements of the century are due to the Anglo-Saxon. It is amazing that he has not yet waked up to the need of progress and improvement in his written speech. (2) The doctor takes no account of the influence of English spelling on English character. His philosophy can hardly deny that the inconsistencies which are so indelibly impressed on the child in his early school years serve to weaken his appreciation and reverence for logic and reason. Max Müller forcibly reverses Dr. Harris in this way:

What, however, is even more serious than all this is not the great waste of time in learning to read, and the almost complete failure in national education, but the actual mischief done by subjecting young minds to the illogical and tedious drudgery of learning to read English as spelled at present. Everything they have to learn in reading (or pronunciation) and spelling is irrational; one rule contradicts the other, and each statement has to be accepted simply on authority, and with a complete disregard of all those rational instincts which lie dormant in the child and which ought to be awakened by every kind of healthy exercise. I know there are persons who can defend anything, and who hold that it is due to this very discipline that the English character is what it is; that it retains respect for authority; that it does not require a reason for everything; and that it does not admit that what is inconceivable is therefore impossible. Even English orthodoxy has been traced back to that hidden source, because a child accustomed to believe that t-h-o-u-g-h is *thoo*, and that t-h-r-o-u-g-h is *throo*, would afterwards believe anything. It may be so; still I doubt whether even such objects would justify such means.

Dr. Harris does not believe that a reform in spelling can be effected by the intense zeal of a few persons or of a large organization. Who does believe it? Is not the whole tenor of my address in perfect accord with his opinion? This whole effort is to control and harness intense zeal and help it to work along moderate and sensible lines. Does anyone discover any "intense zeal" in the personnel of the commission as named? It may be that two or three of them might come under that description, but certainly wise moderation and good sense characterize every person named in that list. Not one of them would think of proposing radical changes now. But while even this association cannot of itself establish simplified spelling, it can do an immense deal toward spreading information and developing sentiment favorable to it. That is the purpose of this commission. In spite of all denials and explanations, Dr. Harris unaccountably persists in seeing in this commission only an agent for offensive and aggressive agitation. He does injustice to the men who have consented to act upon it. They all believe in the thin wedge just as much as he does. But of what service is even a thin wedge if no force whatever is applied to it? One object of this commission, its great object, will be to watch the wedge and to apply force in just such degree and time as may be clearly wise. In that is there any danger of provoking reaction and stirring up resentful feelings among us? It seems to me that the doctor has gone too far in his loss of faith in the common-sense of the people and in his timidity on this question. Some sinister influence seems to have hold of him. Twenty years ago he did not talk this way.

One of the great results, if not the greatest, to be gained by the appointment of this commission would be the publishing of the important fact that Dr. Harris, the eminent, revered United States Commissioner of Education, and a host of scholars and educators with him, are in favor of simplifying our spelling. What proportion of our people today, outside of school circles, know that Dr. Harris is a spelling reformer? The number is very small indeed. I wonder if a large proportion of this audience was not surprised

when they read the list of persons consenting to act on this commission. Information like this is potent in breaking down prejudice and in vitalizing reform sentiment. But this information cannot be spread by suppressing it. I believe thoroly in discretion, and I feel that my proposition is wise and discreet. Am I mistaken? The people need light on this subject and encouragement. How shall we get it to them without arousing antagonism? Is not the plan under consideration a good one? What bitterness could be created by any action which a majority of such a body of men would take?

It does not seem to me possible that the Board of Directors can take any such step next summer as the doctor seems to anticipate. Nothing has been done to warrant it. It is clear that such action can prevail only by Dr. Harris' encouragement and support. Some superintendents and some school boards have allowed their schools the option of using the long or the short form in the spelling of the twelve words. Is there anything harmful or unreasonable in this? I sincerely trust the doctor will not encourage any movement to reverse a step which has already produced such good results.

I earnestly hope that this petition will be approved and sent to the Board of Directors. Its purpose is to remove this question wholly from the arena of debate in this body and put it where it will be wisely and purposefully cared for, and where the directing and promoting power of the educators of the land will be unequivocally behind it. It is the sacred duty of the educational body to take hold of this matter. I move the adoption of the resolution.

THE PAST AND THE FUTURE WORK OF THE DEPARTMENT OF SUPERINTENDENCE

JAMES M. GREENWOOD, SUPERINTENDENT OF SCHOOLS, KANSAS CITY, MO.

The National Superintendents' Department was organized in 1865, and it is the oldest of the eighteen departments, but it was followed immediately by the organization of the Normal Department. Prior to 1870 all educational topics presented in these two departments were discussed before the whole association. From 1857 to 1870 the name of the general association as an educational body was the National Teachers' Association. At the Cleveland meeting in 1870 it was changed to the National Educational Association. As at first constituted, it was an iron-clad organization.

The first constitution of the National Teachers' Association, Art. II—Membership, reads as follows:

Any gentleman who is regularly occupied in teaching in a public or private elementary school, college, or university, or who is regularly employed as private tutor, as an editor of an educational journal, or as superintendent of schools, shall be eligible to membership. Ladies engaged in teaching may, upon recommendation of the Board of Directors, become honorary members, and shall possess the right to present in the form of written essays (to be read by the Secretary or any other member whom they may select) their views upon the subject assigned for discussion.

In the amended constitution of 1870, Art. III—Membership, sec. 1 begins:

Any person in any way connected with the work of education shall be eligible to membership. Such person may become a member of this association by paying two dollars and signing this constitution.

The following list of subjects and the number of papers in each, omitting discussions, will give a good idea of the character and scope of work that has been done in this department :

	Papers
1. American Education - - - - -	4
2. Civil Service in Public Schools - - - - -	2
3. Cost of Maintaining Schools - - - - -	3
4. Colleges and Universities - - - - -	11
5. County Supervision and Rural Schools - - - - -	16
6. Compulsory Education - - - - -	5
7. Criticisms of Public Schools - - - - -	3
8. Child Study - - - - -	6
9. Courses of Study and Methods of Instruction - - - - -	5
10. Drawing and Art - - - - -	4
11. Education and Census Reports - - - - -	3
12. Education in Alaska and among the Indians - - - - -	7
13. Education in Foreign Countries - - - - -	10
14. Education of Dependent and Incurable Children - - - - -	3
15. Elementary Schools - - - - -	16
16. Grading and Promoting Pupils - - - - -	10
17. High Schools - - - - -	10
18. Individualism in Mass Education - - - - -	4
19. Kindergarten Education - - - - -	5
20. Moral Education - - - - -	4
21. Manual Training - - - - -	18
22. National Bureau of Education - - - - -	6
23. National Aid to Education - - - - -	22
24. National System of Schools - - - - -	15
25. Normal and Training Schools - - - - -	11
26. Primary Education - - - - -	4
27. Psychology and Pedagogy - - - - -	5
28. Qualifications of Principals and Teachers - - - - -	6
29. Reading Circles - - - - -	5
30. Supervision of City Schools - - - - -	26
31. School Organization and Territorial Units - - - - -	7
32. School Statistics - - - - -	12
33. Schoolhouses and School Sanitation - - - - -	13
34. School Boards, School Organization, and Administration - - - - -	8
35. The Alphabet, Spelling, and Reading - - - - -	7
36. Teachers and Teaching - - - - -	9
37. The South, and Her Educational Problems - - - - -	15
38. The World's Columbian Exposition - - - - -	3
39. Teaching English and Literature - - - - -	7
40. The Library and the Public Schools - - - - -	2
41. Technical and Special Lines of Education - - - - -	12
42. Withdrawal of Pupils from School - - - - -	1
Total - - - - -	345

Some of these subjects, it will be observed, never possessed any very great interest, either local or general, while others again have occupied a large sphere of the educational thought of this country. For instance, the discussion of manual training, which ran thru a period of eighteen

years, containing eighteen set papers, besides voluminous discussions and suggestions, forms one of the most complete treatises on that subject, from a pedagogical standpoint, that have appeared in print.

Another very important subject that has received very full treatment is the supervision of city schools, beginning in 1868 and still continuing, having covered a period of thirty-one years. It is presented in twenty-six different papers, a number of them of very great value. Could these papers and discussions be bound into a volume for the use of town, county, and city superintendents, it would be an invaluable contribution to the pedagogic literature of this country. Such a treatise is greatly needed, since we have nothing approaching a standard work on this subject. Nearly every imaginable phase of the subject is herein treated with great fullness.

I hope the Board of Trustees of the National Educational Association will take action upon this matter at an early date, authorizing the publication of such a volume.

The discussion of elementary schools, covering a period of sixteen years, is another contribution well worthy of publication. It has received the attention its importance demanded, and yet the last word has not been spoken upon courses of study, methods of instruction, or the tax-paying power of a community. Sixteen papers have been formally presented and discussed by a strong array of teaching talent. It is one of the subjects at present still requiring further consideration. In the words of President Garfield: "When an elementary course is spread out too much it becomes exceedingly thin." The thickening and thinning processes are with us now.

County supervision and rural schools first came on the program in 1868, and continued till 1896. Sixteen different papers contain what has been advanced upon this topic. This field of work has been well mapped out, but leaving much to be done along the lines of modifying courses of study in rural schools, the consolidation of school districts, massing pupils in public schools in the sparsely settled communities by conveying them from remote distances to the schoolhouses at public expense, and the establishment of township high schools. While these questions have been thoughtfully considered in some localities, they are destined in the near future to come more prominently before the public for discussion and action. Already some of them have passed into the realm of business economy and common-sense.

National aid to education from 1872 to 1890 was continually in the foreground. The subject was one of great historic interest, and occupied a much wider range in discussion than some other questions of more vital importance. As a matter of history, illustrating one phase of educational thought, the discussion possesses now a permanent value, owing to the legal issues involved. The condition which produced it having passed

away, it may be assigned to the realm of dead issues, liable, however, to be resurrected under some other, and unlooked-for, form.

Colleges and universities, by virtue of their character and great educational value, have ever held a prominent place in the department. Some of the ablest men in the nation have contributed very scholarly articles, and the discussion now going on presents new and unexpected phases each year. The transformations have been so rapidly pushed forward during the last two decades in college and university work that, compared with the former conservatism which had prevailed, it seems almost revolutionary to many, particularly in regard to elective courses and major and minor subjects for graduation and degrees. A strong reaction in some quarters is beginning to set in, and further concessions in the direction of conservatism will probably be made. College work, however, has been more sharply cut out from university work, and yet the line is a wavy one even on paper. The indications now are that each kind of institution will settle down into its own legitimate sphere, and neither will do the work that belongs strictly to the other. The weakest spot in our universities today is the vast amount of instruction assigned to tutors. As a matter of fact, the students do not come into close enough mental contact with men of superior attainments. The universities will adjust themselves to their work in due time. True manhood is an element of such vital importance that it must not be neglected in the training of young men.

The high-school question has called forth some of the best papers presented during the existence of the National Educational Association. While these contributions have not been so extensive, yet those presented possess great merit. There are many serious questions connected with high schools that remain to be solved. The legitimate function of the high school is certainly not in a state of stable equilibrium. There is a furious striving among too many of them to be more than high schools. A well-grounded feeling exists in many quarters that the sails are catching too much wind, and need shortening. One thing is certain: the high schools should teach some things well, and not attempt to have the pupils absorb a little something of everything without knowing any one thing well. Another grave question is the proper adjustment of the pupils to the courses of study, so that those who can complete the work in four years may do so, and those who require five years should not be rushed thru it in four years. Another adjustment should come at the end of the seventh year in the ward schools, at which time pupils of average attainments are prepared, or should be well enough prepared, to enter upon high-school work. Six years in ward schools, followed by six years in high schools, would prove poor economy in any community, and would be injurious to the pupils.

The subject of high-school statistics is also in a chaotic condition,

altho I endeavored last year to initiate a movement which will give, if generally adopted, results more trustworthy than those heretofore published.

Normal schools have been most fully treated in eleven articles, the first by Dr. Philbrick thirty years ago, and the last in 1898. The articles constitute a distinct and valuable treatise, notwithstanding what has been done in the Normal Department and in the National Council in this special line of work.

Ten excellent articles, spread over a period of thirty-two years, have been presented before the department on education in foreign countries, two of these articles being by foreigners and the others by Americans. In recent years this subject has been most ably summarized by the present Commissioner of Education in his excellent annual reports.

Another subject that has received generous treatment is that of schoolhouses and school sanitation, in twelve articles, some of which are by experts. Unless the subject shall be more completely worked out in the National Council, thru its present Committee on School Hygiene, it will admit of further elucidation. The present status of this subject is represented by the word "unfinished," and the same remark applies to several other topics that have been partially treated.

The South and her educational problem, under different titles, has occupied much space, but not more than its importance demands. It was an absorbing educational topic for years, and one of deep interest. The heroic efforts of the southern people to work out the problem in their own way, and in harmony with their local conditions, is destined to constitute one of the most remarkable chapters in American history. The southern people are handling this complicated question successfully and much better than other people could do it for them. Thru indomitable will-power, coupled with remarkable sagacity, they are accomplishing a great deal educationally, religiously, and socially for millions of people who can help themselves but little.

School boards, school units, school organization, and school administration, in this department as well as in the National Council, have engaged the best and most experienced thought of educators for nearly thirty years, and it is still a matter of very earnest and deep discussion. Every definite deliverance, to the present, is no more than a tentative experiment to hit upon a workable, satisfactory plan of adjustment to social and economic conditions.

Ten papers have been published on grading and promoting pupils, and the subject is still undecided.

It is pertinent to remark that in the general association, or in some of the other departments, several topics have been more fully discussed than in the Department of Superintendence, and in arranging programs this fact has been kept in view each year by the president. This accounts

for the meager treatment of some phases of education in the scheme I have condensed.

In my opinion the following topics will admit of much fuller treatment: child study on a rational and scientific basis; moral education, especially of the feelings; what school statistics ought to be collected; a more satisfactory and rational method of teaching the English language in the rural and city schools; an economic basis of conducting a system of public schools as dependent on the taxpaying power of a community; the relation of the superintendent to the board of education, with a view to avoiding useless and reckless expenditures and the exploitation of fads and frills; how to diffuse each year among the common-school teachers the best information published in the annual reports of the Commissioner of Education; at what hours should ward schools and high schools open and close each day, and what are the best periods for intermission? what effect does the change of teachers in the high schools have on the pupils in regard to the eighth commandment? a clear deliverance in regard to the subjects that are purely informational and those that are culture studies, or the difference between form and content studies; courses of study for elementary schools, including what subjects shall be in the course, and what shall be the aim and scope of the treatment; how shall small graded schools be best supervised, and what kind of course of study is best adapted to the needs of such communities? the ways and means to secure the best results in manual training in the grades so as not to detract from the efficiency of the regular work; what, how much, when, and by whom shall this be done? how much of domestic science and agriculture should be taught in the rural schools? what is the educational value of marking cadets at West Point and Annapolis? have examinations a legitimate place in the public schools?

Some of these subjects should be referred to committees for special investigation, and others assigned to individuals for additional discussion at future meetings of this department.

DISCUSSION

SUPERINTENDENT FRANK B. COOPER, Salt Lake City, Utah.—It seems to me that this body rests under much obligation to Superintendent Greenwood for the pains and labor taken by him in preparing a résumé of the work of this department, so concise and satisfactory. It would have been interesting and beneficial if one so conversant with the department and so long identified with its meetings could have included in his analysis an estimate of how far the discussion of these thirty-five years has affected the development of supervision.

This department has three well-defined functions. It exercises thru its social features, as well as thru the medium of its programs, an inspirational influence especially valuable; it has a didactic and instructive function afforded by addresses and discussions; it also has a definitive function exercised thru its declarations. The first

two have always been fulfilled. The last has not been, in my opinion, sufficiently used. This body has not touched the highest point of its usefulness when it has merely furnished opportunity for social contact and for able discussions of the problems connected with school supervision. All that is good and useful, but the effects are neither definite nor pervasive enough. Only once within the past few years has the department risen to this highest point. That was at the Cleveland meeting, when the report of the Committee of Fifteen was rendered and discussed.

Superintendent Greenwood suggested that there should be "a clear deliverance" by the department upon "those subjects that are purely informational and those that are culture studies." There should be at intervals a succession of "clear deliverances" upon topics legitimately connected with the work of supervision. Such declarations, clearly defined, put forth as the well-digested conviction of this body, would be authoritative and would have inestimable value.

DEPARTMENT OF SUPERINTENDENCE OF THE NATIONAL EDUCATIONAL ASSOCIATION

BRIEF SKETCH OF ITS EARLY HISTORY¹

EMERSON E. WHITE, LL.D., COLUMBUS, O.

At the meeting of the National Teachers' Association held in Harrisburg, Pa., in August, 1865, the superintendents present had several conferences looking to the organization of a national association. A preliminary organization was effected, with Hon. B. G. Northrop, of Massachusetts, chairman, and Hon. L. Van Bokkelen, of Maryland, secretary. It was decided to call a meeting of state and city superintendents in Washington, D. C., the following February for the organization of a national superintendents' association and the consideration of subjects related to school administration. The special purpose of holding the meeting in Washington was to interest Congress in the creation of a national bureau of education, and the writer was appointed to prepare a paper on the subject for the Washington meeting.

The proposed meeting for organization was held in Washington, February 6, 7, and 8, 1866, Hon. B. G. Northrop, chairman, and Hon. L. Van Bokkelen, secretary. The constitution adopted named the organization the National Association of School Superintendents; declared its purpose to be the consideration of subjects related to "school organization and management;" and limited membership in the association to "state, city, and county superintendents of schools" (Proceedings, 1868, p. 40), this provision being subsequently so modified as to make ex-superintendents, who were members when in office, eligible to membership. It provided for the annual election of a president, three vice-presidents, a secretary, a treasurer, and an executive committee of five members.

At this meeting papers were read by Superintendent Charles R. Coburn, Pennsylvania, on "School Statistics;" by Superintendent L. Van

¹The amended spellings adopted by the Board of Directors do not appear in this address. [See resolution of Board of Directors, Los Angeles meeting, July 13, 1899.]

Bokkelen, Maryland, on "The Practicability of Greater Uniformity in State School Systems;" by Superintendent C. M. Harrison, New Jersey, on "Defects in Our State School Systems;" by Superintendent Newton Bateman, Illinois, on "Leading Features of a Model State School System;" and by Commissioner E. E. White, Ohio, on "A National Bureau of Education." This last paper was adopted by the association, and a committee, consisting of E. E. White, Newton Bateman, and J. K. Adams, Vermont, was appointed to memorialize Congress on the establishment of a national bureau of education.

The committee prepared a memorial and drafted a bill, and the next day the memorial and bill were introduced in the House of Representatives by General James A. Garfield, of Ohio.

The importance of a national bureau of education had been presented to the National Teachers' Association on several occasions, first in 1859, and at the Harrisburg meeting it elicited very general interest, the establishment of such a bureau being advocated by President Greene in his inaugural address; by J. P. Wickersham, Pennsylvania, in a paper on "Education and Reconstruction;" and by Andrew J. Rickoff, of Ohio, in a paper wholly devoted to the subject. Resolutions strongly favoring the movement were passed.

A second meeting of the association was held in Indianapolis, Ind., August 12 and 13, 1866, in connection with the annual meeting of the National Teachers' Association, Hon. B. G. Northrop, president, and Superintendent L. Van Bokkelen, secretary. A paper was presented by Superintendent J. W. Bulkley, Brooklyn, N. Y., on "The Cost of Education per capita in the Different States;" a report by Superintendent Charles R. Coburn, on "State School Statistics," which was referred to a committee of three to report back the next day, when the subject was thoroughly discussed by the most competent experts in the body; and a report by the committee appointed at Washington on the national bureau of education, stating that an approved bill establishing a national department of education had passed the House of Representatives and was pending in the Senate. A committee, consisting of E. E. White, O. Hosford, Michigan, D. Stevenson, Kentucky, J. W. Bulkley, and L. Van Bokkelen, was appointed to bring the House bill to the attention of the Senate and urge its passage. Committees were appointed on state school statistics, city school statistics, and on the relation of education to crime and pauperism.

The third meeting of the association (second annual) was held in Nashville, Tenn., August 17, 1868, in connection with the meeting of the National Teachers' Association, no meeting of the national association being held in 1867. E. E. White was president and L. Van Bokkelen secretary. The subjects considered at this meeting were: (1) "School Funds—How Best Raised, by State or Local Taxation, How Apportioned,

How Disbursed," the subject being introduced by a paper by General John Eaton, state school superintendent of Tennessee; (2) "School Supervision," introduced by Superintendent J. W. Bulkley, Brooklyn, N. Y.; and (3) "School Organization in Townships," introduced by Superintendent D. B. Hagar, Salem, Mass. At the evening session the president delivered an address on "The Family, the Community, and the State in Education." The sessions were attended by members of the legislature of Tennessee and other citizens interested in the organization of school systems.

I have thus given somewhat fully the proceedings of the first three meetings of the association as evidencing concretely its aims as originally organized. The minutes of the subsequent meetings to 1880, and later, show that the time of each meeting was largely devoted to the consideration of practical questions related to school organization and management. Little effort was made to draw or entertain promiscuous audiences. The very few exceptions were due to a failure of the officers to recognize the main purpose of the association or duly to appreciate the vital problems in school organization and management needing solution. The superintendents met to widen their knowledge and increase their efficiency in school administration. The subjects were not discussed in a series of formal papers, but in a free interchange of views, often in the so-called "round table" manner.

The first seven meetings were held in the reconstruction period, in which nearly half of the states and many cities reorganized their school systems.

In the first twenty years nearly half of the meetings were held in Washington in February or March, the special purpose being first the organization and subsequently the defense and strengthening of the Bureau of Education, and also the securing of national aid to education in the South.

At the Cleveland meeting, in 1870, the National Teachers' Association was reorganized with the title of the National Educational Association. The revised constitution provided for four departments, viz.: School Superintendence, Normal Schools, Elementary Schools, and Higher Instruction, with the provision (Art. III, sec. 2):

Each department may prescribe its own conditions of membership, provided that no person shall be admitted to such membership who is not a member of the general association.

This section was a part of the constitution for twenty-five years.

The National Association of School Superintendents was organized as the Department of School Superintendence, and the only changes in its constitution were in the title (as above) and the condition of membership, only members of the general association being eligible.

The minutes of the meetings from the organization in 1866 to 1890 show that the election of officers took place at the meeting held in

connection with the annual meeting of the general association, and only superintendents and ex-superintendents were elected to office. At the Nashville meeting, in 1889, Professor Woodward, of St. Louis, was nominated for president *pro tem.*, but he properly declined, and Mr. Rickoff was elected; and, if the writer's memory is trustworthy, only those who were eligible to membership, as prescribed in 1866, voted in the election of officers. Since 1890 the department has held its annual meetings in February or March (no meeting being held in 1893), and the officers have been chosen at these meetings.

Since 1890 the meetings of the department have assumed more and more the character of mid-year meetings of the general association, and their programs have increasingly attracted the attendance of persons not directly connected with school administration. Meanwhile important and even vital problems in school management are waiting for solution. It is true that superintendents are interested in nearly all departments of school work, but it is also true that school supervision has its special functions and duties. If the several departments of the National Educational Association are to justify their existence, there must be a closer differentiation of function, and the special problems in each should receive the attention of experts of ability and experience.

In the revision of the constitution of the general association in 1895 the provision relating to membership in the departments (Art. III, sec. 2) was omitted, and under the constitution, as amended, each department has been free to prescribe its own conditions of membership, but only members of the general association have been eligible to office (Art. IV, sec. 4). The amendment adopted by the active members at the Charleston meeting, 1900, provides that only active members shall have the right to vote in the association or its departments.

The Department of Superintendence has full authority under the constitution of the association to limit its membership to superintendents, supervising principals, and other officers directly connected with school administration, and by regulation it may restore the aim and purpose prescribed at the organization of the body. The way is clear for such action if the members of the department deem it advisable. The only limitation is that all members entitled to vote must be active members of the general association.

MEDICAL INSPECTION IN PUBLIC SCHOOLS

DR. W. S. CHRISTOPHER, CHICAGO, ILL.

[AN ABSTRACT]¹

Medical inspection in the Chicago public schools had its origin in a local epidemic of diphtheria in the Alcott School. The principal

¹ The author of this paper failed to furnish a copy for publication.

reported five cases from that school in two days. I was appealed to for advice, but could do nothing. That condition indicated a necessity for some plan of relief. Just four weeks from that day a system of medical inspection was started in the Chicago schools.

The plan of medical inspection in Chicago is different from that employed in New York or Boston; the teachers there being the channels by means of which attention of inspectors is called to suspicious cases. In Chicago the teacher is the instrument too, but we have advantage of the rule that when the pupils are out four consecutive days they are excluded until they have been inspected by the proper authorities. Such regulation is necessary, because scarlet fever in a mild form is not easily detected. It becomes extremely desirable to detect milder forms of contagious diseases, because children so infected become bearers of the disease in its more serious forms. We are not accustomed, in Chicago, to admit children upon certificate of the attending physician, because such certificates are utterly valueless.

I do not blame the physicians for giving certificates when one is demanded by the patient, because their livelihood is at stake in many cases. That being the case, they cannot be independent, and will often give a certificate without proper warrant, upon the demand of the patient. In the case of the medical inspector, he can be independent, because he has nothing at stake whether he issues the certificate or not.

I deem it a very great advantage to have the medical inspector directly under the control of the board of education, and not under the control of the board of health. I believe it is much more efficacious when administered by inspectors who are directly responsible to the board of education, since only about one-seventh of the cases of contagious diseases in the public schools are reported by the health department.

One of the difficulties that we meet is in disposing of the pupils who have been absent four days upon their return to school; formerly they were required to report at the principal's office upon their return, and there wait until the arrival of the medical inspector. It often happens that the inspector cannot reach the office until 11 or 12 o'clock. Parents object, and not without reason, to having their children herded together in this way. We meet this objection by sending the pupils to the rooms to which they belong, there to await the arrival of the medical inspector, pupils awaiting inspection to report to him at once.

Another objection which we have to overcome, and which still exists, arises from the opposition of parents to having their children examined by medical inspectors. Most parents fail to understand the object in view; a few, however, appreciate the benefits of the plan and heartily support it. Recently one of the patrons of the schools refused to have his child subjected to the examination of the medical inspector, claiming that the certificate of the family physician, which the child presented,

was sufficient evidence for school authorities. Suit was brought to compel the board of education to receive the child upon the physician's certificate, but the judge held that the board of education had a right to require inspection.

We ought to have in Chicago one hundred and fifty inspectors instead of fifty, so that inspection could be completed earlier, that is, within a half-hour after the opening of the schools in the morning. We spent last year \$13,000 for medical inspection, but the appropriation has now been cut down to \$9,000. If we could have more money and more inspectors, we could make the system much more efficacious.

In the city of New York there were examined during the period of ten months 140,000 pupils; number excluded, 7,606. In Chicago, during a period of seven months, there were examined 115,000 pupils; the number of pupils excluded was 7,600. The number excluded in New York was .5410 per cent. of the number examined, while in Chicago during a shorter period .66 per cent. were excluded. Out of 7,606 pupils excluded in New York city, 3,500 pupils had parasitic disease in the head, as against 500 from the Chicago schools during seven months for the same reason. In Chicago we have done double the work that they have done in New York, with one-fourth the force, at one-half the cost. The medical inspectors in New York and Boston report once a month; in Chicago they report once a day. In 1898 thirty-two cases of scarlet fever were reported as having been excluded from the New York schools; in Chicago 501 pupils were excluded in seven months for the same reason. I do not offer this statement in criticism of our neighbors, but to compare the methods of the two systems used.

DISCUSSION

SUPERINTENDENT AARON GOVE, Denver, Colo.—The objection raised this morning, that the question then under discussion was not legitimately a part of the work of this department, does not apply to this question. The question of medical inspection touches the work of the superintendents in a vital way. I do not know much about the comparative merits of the systems employed in different cities, and must refer to medical inspection as I know it. This is a practical matter and one that I very heartily indorse. The regulation of contagious diseases is not the only subject of medical inspection. The eyes and ears should be tested, and I am not sure but the teeth are proper subjects for inspection.

The use of the card catalog in keeping a record of the items of physical conditions deemed proper for inspection is a valuable help. This card should give the name of the pupil, state whether vaccinated, with the date, and give indication of bodily defect of any kind. This card goes with the pupil, whether he remains in the system or goes elsewhere.

In Denver eight expert opticians have placed themselves at the disposal of the principals. No embarrassment arises from our use of this help, because, when defective vision is discovered, the teacher merely informs the parent that the child's vision is

seriously defective. We positively decline to give out information contained on the cards and deny access to them by speculative traveling doctors.

SUPERINTENDENT E. P. SEAVER, Boston, Mass.—Chicago may have been able to establish a system of medical inspection in four weeks, but we have found it too great a task to perfect a system in so short a time. We have, however, had medical inspection for seven years, while Chicago has had it in operation for two years. The medical inspectors of Boston visit the schools every morning, and inspect, not only the pupils selected by the teachers, but also many others.

The Boston inspectors have done more than inspect; they have established pleasant relations with the boys and girls. The teachers have learned much from them about the symptoms of contagious diseases. The measures taken regarding scarlet fever, etc., are very thoro. It is true that this inspection occurs under authority of the board of health, but the relations of inspectors and school authorities have been pleasant and harmonious thruout. The physicians who constitute the board of medical inspectors do this work for the schools, not because they are adequately paid, but because it is a part of their duty to the public.

One advantage our system has is that a large number of the medical inspectors are agents of the board of health, and they therefore have double authority. But they may not only inspect, but may also isolate cases in the homes. They may send pupils home from school who appear to be ill, and then later on in the day may visit the homes of such children, as agents of the board of health, investigate the illness, and isolate the pupil in case of contagious disease. Such a pupil may be kept at home by the authority of the inspector until the recovery is completed. Numbers of possible epidemics have been stamped out thru the agency of medical inspectors.

SUPERINTENDENT W. H. MAXWELL, New York city.—I am prevented by considerations of good taste from noticing more than one or two points of the address of Dr. Christopher. I give attention to these only because of a possible reflection upon the fidelity of the inspectors of New York. Being in a position to know, I deny emphatically that the reports submitted by them are padded or represent conditions other than as they occur.

An injustice appears in the comparison of the number of scarlet fever cases reported in Chicago and New York. The thirty-two cases reported in New York represent the cases found in the schools, and not the total number of cases excluded.

DR. W. O. KROHN, Chicago, Ill.—The object of the American school is to develop the best type of citizenship, best physically, best mentally, best morally—a complete, well-rounded-out, well-developed personality. Such a type of citizenship is impossible without the soundest physical basis, a healthy body.

Therefore the state owes two duties to children: first, the preservation of health; second, education. In order to obtain the second we have compulsory attendance at school. It is not only illogical but unjust to maintain that we should have compulsory-education laws in the absence of good laws for the medical inspection of our schools. By what reasoning can we warrant ourselves in compelling children to go into the midst of danger, when we know that the school is frequently a focus for the spreading of disease?

There is greater difficulty in enforcing medical inspection in the smaller cities and towns than in our large cities, for in the smaller community the sense of individualism is more pronounced. The smaller community is more nearly a social democracy. In the city the administration is more impersonal; enforcement is easier.

The most important argument for medical inspection is, to my mind, the educational benefit to the community at large, because the direct and aggressive tendency in the operation of the medical inspection of the schools is to bring to the attention of the parents in particular, and the community in general, a knowledge of the common laws of health. This knowledge soon becomes universal in spite of the most lethargic conditions. A better, more intelligent citizenship results.

The cry of the objector to medical inspection is *paternalism*. There is no real argument in this sordid cry of paternalism. It is simply a *cry*. We have heard this campaign slogan of paternalism before. It is always voiced when any movement is undertaken for improving social conditions. We have heard it when factory and sweat-shop laws were proposed. We have heard it when we attempted to care for the step-children of the state, anywhere. If it be paternalism to care for the health of the children and of the community by providing medical inspection, then let us have more paternalism.

THE USE AND CONTROL OF EXAMINATIONS

PRESIDENT ARTHUR T. HADLEY, YALE UNIVERSITY

Every practical educator knows that an examination has two distinct aspects: one looking toward the past, the other toward the future. It is a means of proving the student's attainment in that which has gone before; it is also a means of testing his power for that which is to come. It sums up the result of previous work in such a way as to help us in meting out praise or blame for what he has already done. It at the same time indicates the degree of his mental advancement, and enables us to place him for the coming year in those classes from which he will gain most profit and for which his powers will be most fully adequate. It protects our schools against waste of time in the days which precede it, by setting a mark which the student must reach. It protects our colleges against waste of time in the days that follow it, by giving us a basis on which to group our classes and arrange the tasks which are imposed. It is at once a measure of proficiency in what has been previously learned, and of power for what as yet remains unlearned.

Unfortunately, these two qualities do not always coincide. We have all had experience with pupils who have been faithful in the performance of their duties, and have acquired that kind of knowledge which enables them to pass a well-conducted examination creditably, but who do not possess that degree of mental training which fits them to go on toward higher studies side by side with those whose acquirements may be less, but whose grasp of principles is stronger. Proficiency in subjects studied during the few months previous to the examination is at best largely a matter of memory; and it not infrequently happens that such memory is most highly developed in those very pupils who have done comparatively little real thinking for themselves. This difficulty may be lessened by skill in arranging the examination; but, strive as we may, it can never be wholly eliminated. On the contrary, it is a thing which is increased by many of our modern changes, both in courses of study and in methods of examination.

In many of the older subjects of study the difficulty hardly exists at all. Take mathematics, for instance. In this group of sciences proficiency in one grade is almost synonymous with power to go on with the

next. There may be a few children with minds so peculiarly constructed that they are accurate "lightning calculators," and of very little use for anything else; but such children are the exception, and not the rule. In general, the boy or girl who has mastered the simple operations of arithmetic is competent to go on with the more complex ones; while the boy or girl who fails in these simple matters shows corresponding unfitness for what is more advanced. Similarly, knowledge of arithmetic as a whole is a test of fitness to study algebra; knowledge of algebra, a prerequisite to analytical geometry; analytical geometry, a necessity for the student who would go on into the differential calculus. What is true of mathematics is true of grammar, and of those older forms of linguistic study which were based upon grammatical drill as a foundation. With proficiency in the elements, advanced class work was made possible and profitable; without it, the pupil wasted his own time and that of his fellows.

But with new subjects, and with new modes of teaching, this necessary sequence is less marked. In studying literature, or history, or descriptive science, by the methods which are now regarded as most modern, there is no such connection between attainment in what is past and power over what is to come. It is not certain that the pupil who remembers the answers to the questions which are asked in most of our literature examinations thereby proves his fitness to go on with the works which are to follow. It is not sure that power to remember the facts of history which are taught in elementary classes connotes a corresponding power to use those facts in advanced studies. It is even less probable that the results of a course in descriptive science pursued at an early age show any indication of power to pursue these subjects farther. I do not wish to be understood as objecting to modern methods of science study. For those who are not going to carry these matters to a point where power in scientific research is needed they are a very valuable means of general information. But for that minority who do need to develop power in research such premature acquirements are often a hindrance rather than a help. One of the few men in the country who combine high attainments in theoretical and practical physics—a man eminent alike as an investigator, a teacher, and an inventor—is authority for the statement that you cannot make a really good physicist out of a boy who has been put thru a full course of descriptive science before he has studied the mathematical principles which underlie it. I do not know whether this broad generalization can be proved. I am inclined to think it an overstatement. But the fact that such a statement can be made by a responsible man shows that there is no necessary connection, but rather a conspicuous absence of connection, between acquirements in elementary science, as now taught, and power to go on with that science into classes which do work of a really advanced character.

Side by side with this change in subjects there has been a change of

methods of examination. Two generations ago a large part of our tests were oral. Today the increased size of the classes has necessitated the use of written examinations. That the change has been on the whole a salutary as well as a necessary one I do not question. In an oral examination the personal element is so strongly accentuated that it is almost impossible to have a guarantee of fairness in its administration. However good may be the intentions of the examiner, he cannot always keep himself free from his own prejudgments; while the absence of any permanent record to which appeal can be made prevents us from applying any corrective to the wrong impressions of the moment. But the effect of the change has been to make the examination more exclusively a test of proficiency in what is past and less available as a measure of power for what is to come. In the oral method, if it was well conducted, the examiner found some branch of the subject with which the pupil was familiar, and there proved or disproved the thoroness of his knowledge. By so doing, the examiner could find out what the pupil really thought about the subject, rather than what he more or less mechanically remembered. But the written examination, even in the best hands, is apt to be a test of the *range* of a student's proficiency rather than of its thoroness. In the majority of the subjects on which we have to examine it is almost impossible to construct a paper which will test the student's reasoning power as adequately as it tests his memory. It is apt to become a mere inquiry as to the extent of the pupil's knowledge. Whenever this is the case, it loses the major part of its value as a measure of fitness for anything which is to come.

The evils thus far described are felt in all examinations, no matter by whom they may be conducted. But they show themselves with peculiar force whenever the student passes out of one school or one stage of educational work and into another. In rising from class to class within the limits of a single institution, the pupil remains under the charge of a head master, who can, to a large degree, correct the evils inherent in the examination system. He can direct his subordinates to base their scheme of promotion on records of special work and other matters outside of the scope of the examination itself. He can so arrange the course of study that entrance to higher grades depends upon merit in particular lines, rather than on general proficiency or faithfulness. When, however, the student passes from the control of one authority to another independent one, it is very hard to carry any such policy into effect. The difficulty is seen at its worst in civil-service examinations, where a student's entrance into government employment is made to depend upon tests of past acquirement which can, at best, very imperfectly indicate his fitness to serve the country in the line which he has chosen. I would not for one moment undervalue the good which has been done by the adoption of the examination system as a basis for appointment in our civil service;

but I believe it to be generally admitted, even among the friends of that system, that its value depends upon its effect in eliminating the grossly incompetent, who rely on political influence alone, rather than upon its accuracy in determining the candidate's probable usefulness as a public servant.

The same difficulty exists, tho in less degree, in the transition from one grade of educational institution to another. It is felt in the passage from grammar school to high school, from high school to college, and from college to professional school. In going from grammar school to high school, or from college to professional school, the difficulty is to some extent lessened by the fact that there is so often a common board of control which makes co-operation and consultation easy between the authorities of the two parts of the educational system. In the passage from high school to college, on the other hand, the evil is felt most seriously, because of the complete separation of control and the remoteness of location which so often makes a system of personal consultation impossible.

It is in this application that the problem of examinations gives rise to the most acute controversy. How shall we arrange our tests of the student's proficiency in what is behind him in such a way as to assure ourselves of his power to go on with what is before him; to give to the school the necessary freedom in its methods of instruction; to give the college the assurance that its pupils will be well prepared for their work; and to give the students themselves, as they pass from one grade to the other, the certainty of reasonably fair treatment? This is the question which is before us. With so many conflicting requirements, it is no wonder that there is divergence of opinion with regard to the proper answer.

Three distinct methods have been devised for meeting this difficulty :

1. To make the range of examination questions wider, so that the student shall have every possible chance to show what he knows.
2. To supplement the written examination paper by other tests, such as certified notebooks, objects produced by previous work, etc.
3. To depend on certificates given by the teachers who have previously had the candidate in their charge; thus taking the work of entrance examination out of the hands of the college authorities and relegating it to the preparatory schools.

The first of these methods has a certain amount of merit. A skillful examiner can make a paper so broad in its scope that a candidate who knows anything whatsoever about his subject will find some topic on which he is at home. He thus in some measure reduces the element of chance and renders real help to those candidates who understand one part of the subject better than another. But, unfortunately, this increased range of inquiries may prove almost as helpful to the undeserving candidate

as it does to the deserving. The multiplicity of questions gives a great opportunity to the coach who makes a specialty of preparing candidates for a particular series of tests, instead of educating them for their life-work. Knowing how wide a range of topics the examiner must cover, he can predict, with reasonable certainty, some specific things which the paper is likely to contain. The chances are that his pupils will do well on these questions for which they have been specially prepared; and thus the deserving but unskillfully prepared candidate, tho he makes a better absolute showing under the system of long papers than he did with short ones, finds his relative position even worse than before. Moreover, the inevitable hurry and confusion incident to the attempt to deal with a long paper hurts the deserving student far more than it hurts his competitor who has been skillfully crammed for this particular trial. These evils are clearly exemplified in the English civil-service examinations. The amount of time and thought which has been spent on the preparation of papers for these examinations is very great indeed. There has been an honest effort on the part of those in charge to get the very best aspirants for the public service of the British empire. Yet, in spite of all these things, it has become proverbial that success depends upon skillful coaching far more than upon intellectual merit or good general training. What is true of the English civil-service examinations is true, in only less degree, of the English university examinations; and the same evils are making themselves felt in this country wherever we approximate the English practice.

The system of accepting certified notebooks to supplement and correct the results of examinations is essentially a compromise. It has at once the merits and defects which are incident to a compromise system. It is, I believe, used with good effect at Harvard in some of the subjects which the faculty require on their entrance examinations. But the arguments which can be urged in its behalf can for the most part be urged even more strongly in favor of a frank adoption of a certificate system as a whole. There is something quite illogical in accepting the pupil's record of his own past work, and not accepting the master's judgment as to the efficiency of that work; for, unless the master is a clear-headed and honest man, the record is practically worthless, and, if the master is thus clear-headed and honest, he can judge far better than any examining board the degree to which the pupil has profited by lectures and experiments. When once a subject presents such characteristics that the examiners confess their inability to judge of the student's work by the paper which he writes under their direction, it certainly seems a rather unnecessary waste of time and strength for them to insist on having any paper at all.

The third method—admission to college on certificate instead of on examination—has many advocates. I shall not here attempt to discuss

its merits and demerits in full. It is a subject which would take for its full analysis more time than we now have at command.

It is unquestionably true that a good preparatory-school teacher can, in nine cases out of ten, judge of the fitness of his pupils to enter college far better than any college examining board can possibly hope to do. It is also true that the right of admission by certificate allows such a teacher a freedom in the choice of methods which is of great advantage, both to him and to his pupils. In spite of these facts, it has disadvantages which have prevented some of our leading institutions from adopting it, and which cause the present trend of movement to be away from the certificate system rather than toward it.

In the first place, to take the most obvious objection, by no means all of our secondary-school teachers are good ones. A large number cannot be trusted to give certificates. An equally large number—and a more difficult class to deal with—are not so good that we can safely trust them, nor so bad that we can safely refuse to trust them. Under these circumstances the colleges have only shifted the seat of their perplexities. Instead of selecting their students by an examination, they select the teachers whom they are to trust by a process less automatic and more invidious than any scheme of examinations.

In the second place, the abandonment of an examination system by the colleges takes away an important stimulus for keeping up the standard of admission requirements. The competition of men in different schools to prepare their pupils to pass examinations has the same sort of mixed effect that competition has in any other form of business. It causes methods to be adopted which are not always of the very highest type; but it at the same time brings out an amount of initiative and energy in teachers and pupils which can be attained in no other way. Even the authorities who admit by certificate say frankly that they would be very reluctant to have that practice become universal. They are free to say that the influence of those colleges which require examinations is the thing which keeps our best schools up to that standard which enables other colleges safely to admit their students by certificate.

Finally—and this is the decisive argument for the retention of the old plan—those colleges which insist on examinations think that they get a better class of students by that means than they would by any other. They get those boys who do not shrink from a trial of intellectual strength; boys who welcome the chance to measure their power with that of their fellows in entering college, as they will inevitably be called upon to measure it if they seek first-rate successes in later life. We all remember the fable of the choice between the doors: on the one hand, "Who chooses me shall get what he deserves;" on the other, "Who chooses me must hazard all he has." The certificate system attracts those who would go to the former door; the examination system calls to those who are

willing to venture the latter. We all know the two types, and their relative merits.

If each of these alternatives thus proves unsatisfactory, is there not some possible combination which may be suggested?

I venture to believe that such a possibility exists, and that it may be found in a classification of collegiate requirements into different groups, susceptible of separate treatment.

If we look at the requirements for admission into any of our larger colleges, we shall find that they naturally fall into three classes: first, those subjects which are required because the student must know them in order to have the power to go on with his subsequent studies; second, those which are required because the college authorities believe them to be desirable means of attaining such power; and, third, those which are required because the men in the secondary schools desire them and ask for the moral support of the colleges in promoting their study. As a notable example of the first class we may take mathematics. In our scientific schools, and to a less degree in all our colleges, some knowledge of mathematics is an absolute necessity for the successful pursuit of studies included in the course. The pupil must know a certain amount of algebra in order to study trigonometry; he must know a certain amount of trigonometry in order to be able to pursue successfully the arts of railroad surveying or of bridge design. The same characteristic holds good of most of our language requirements. Every student whatsoever needs to understand something of the use of the English language, because without such use all his communications of thought, if not his underlying thoughts themselves, are sure to lack precision. Any benefit which is expected from complex ideas by a man or woman who does not know how to express them is likely to prove illusory. And every student who is to pursue foreign literature in his college course must first have a knowledge of the elements of the language in which it is written, because without such knowledge he will waste his own time and that of his fellow-men.

Side by side with these requirements which are indispensable come others of a more auxiliary character. Not content with requiring a knowledge of English expression, the colleges prescribe the reading of certain books in English literature. Not stopping with the test of power to read and parse individual passages in Latin, the colleges prescribe a certain quantity of Latin reading as essential to the purpose in hand. They also require with each year an increasing knowledge of modern languages, not because the student is necessarily going to use both French and German in his college studies, but because no man is regarded by them as fitted for higher education unless he has a certain reading knowledge of both these languages.

There is also a third group of studies required, not as a necessary basis for subsequent work, but as a part of the general scheme of

secondary education in the country, to which it is desirable to give fair recognition. So many men in our schools desire to teach history, and can teach it well, that they wish this subject to be recognized in the college requirements, lest, by a failure to recognize it, its position in the schools should be degraded. What is true of history is true of a great deal of that descriptive science which has so large a part in our school courses at the present day. It is put in the scheme of requirements for admission to college, not because of a direct need of the college student, nor even because of its indirect bearing on meeting such a need ; but because of a desire on the part of the colleges to co-operate with those who are engaged in the preparation of their pupils.

It is obvious, however, that the attempt to put all these different classes of subjects on the same basis is quite illogical. The student who rightly and deservedly is found radically deficient in studies of the first class has no business to go on with his course. No pupil who is ignorant of arithmetic can study algebra without injuring himself and his fellow-students. No pupil who is ignorant of elementary algebra and geometry should be allowed to go on with the scientific school course, no matter what may be his attainments in other lines. In like manner, a knowledge of the essentials of English expression and of certain fundamental points in those other languages which the student is likely to use in his college course is a matter of vital necessity. No amount of acquirements and attainments in literature can logically be allowed to make up for a deficiency at this central point. It is on these subjects that the case for college examinations is strongest. This is the point at which any deficiency of preparation on the part of the candidates will hurt them most. It is also the point where an examination system is most feasible ; where cram counts for least and power for most ; where the school-teacher with high ideals of education has least reason to complain of the requirement that his pupils should be examined by an independent authority, because no method of education which falls short of meeting this test can possibly be considered good.

In the second group of studies—those which are auxiliary to the attainment of this power—greater latitude can be allowed. I should be in favor at once of putting all examinations on the extent of knowledge in these auxiliary subjects into the hands of a common examining board, in which different groups of educators were represented. Whether it would be wise to go one step farther, and introduce the certificate system in subjects of this group, is a matter which I should hardly like to pre-judge at present.

In the third group of studies the certificate system could be allowed from the very outset. It is just here that the arguments for that system are strongest, for in this group the possible variety of methods is greatest, the difficulties of examination most unavoidable, and the reasons strongest

for preferring the teacher's judgment to that of an independent examiner or examining board.

If a phrase is needed to describe the principle on which this whole system of division rests, I should formulate it as follows: Divide our requirements into three groups of subjects: (1) prerequisites for power to go on with collegiate study; (2) attainments auxiliary to such power; (3) attainments chiefly useful in the general scheme of education. Let the tests of power as to what is to follow be in the hands of those who are to have charge of the student in the years which are to follow. Let the tests of attainment on what is behind be in the hands of those who have had charge of the pupil in the years which are behind.

This combination would have the advantage of reducing the number of our college examinations—in itself an extremely desirable thing—of preserving a standard of quality which schools would compete with one another to reach, and of allowing at the same time the utmost possible latitude in the methods employed by different teachers to bring their pupils up to that standard. On the other hand, it would be attended with certain dangers and difficulties. The chief objections which are likely to be thus raised may be stated as follows:

1. The attempt, which has been more than once made, to lay special stress on tests of power rather than on knowledge—for instance, sight-reading of Latin and Greek authors, translation of English into Latin, etc.—has disappointed the expectation of its advocates.

2. In the inevitable uncertainty attending the results of entrance examinations—due partly to luck, partly to the personal equation of the examiner, and partly to the varying physical condition of the candidates—the substitution of a small number of decisive examinations for the very great number now existing will cause some candidates to be unjustly rejected who, under the present requirements, atone for their deficiencies in some lines by indication of ability in others.

3. The necessary withdrawal from the examination scheme of subjects like history, descriptive botany, or parts of the English papers, will serve to give them an apparently inferior position, and will result in their neglect in those schools which desire to prove their success on the basis of the showing made by their candidates in college examinations.

Let us take up these points in order.

The first of these objections is, I believe, historically well founded. It is, however, based on the experience of a time when neither teachers nor examiners knew their business as well as they now do. Latin prose composition, as taught in the schools of a generation ago, was simply a piece of mechanical drill on certain fixed phrases, without any infusion of the spirit of the language. The examiners, themselves trained, for the most part, in these same defective methods, set papers which were not real tests of power, and encouraged cramming of a bad sort. The same thing may

be said of most of the examinations in sight-reading of classical authors. They furnished no measure of that kind of power which is required by the college student in his subsequent use of the Latin or Greek language. Many of these papers depend far more upon the quick command of a vocabulary, at times when the candidate is specially nervous, than upon knowledge of linguistic structure. In the easy Latin or Greek which is generally given, the candidate who can remember the vocabulary can guess at the structure far better than the candidate who knows the structure can extemporize the vocabulary. Nor can this difficulty in the sight paper be wholly avoided by notes which give the meaning of a few words; for those words which help one boy may prove useless to another. The partial failure of sight papers to accomplish their end proves chiefly the defectiveness of the means, and little or nothing as to the unattainability of the end.

Of course, it may be freely admitted that it would require great ability to carry out the proposed plan by right methods instead of wrong ones. It would perhaps be a number of years before we should know what furnished, on the whole, the best means of testing the student's power. But I feel quite confident that nothing which has hitherto been done indicates that the question could not be fairly well solved within a reasonable time.

The argument concerning the dangerous fewness of the papers under the proposed plan deserves careful consideration. Anyone who knows the uncertainty attending the results of examinations in general, and of written examinations in particular, will be reluctant to reduce the variety of chances given to the student to prove in different kinds of papers his probable fitness for any course which he desires to undertake. Yet I believe that the dangers which arise in this way would be more than offset by the safety due to an increased care of reading which the substitution of the few papers for the many would render possible. If we should further extend to teachers of proved ability the opportunity to recommend, at the risk of their own reputation, for provisional admission to our freshman classes, pupils to whom the new system seemed to have done injustice, we should have in our hands a check which would not be greatly liable to abuse, and which would help to protect deserving students from the consequences of ill luck.

The objection regarding discrimination between studies is perhaps the one which will be most strongly urged. Yet I believe this objection to be based on what is in the long run not a fault, but a merit.

It is natural enough that a master in a secondary school who has special ability in teaching science or history should wish for the opportunity to prove what his pupils can do in collegiate examinations. He will urge that, if they are not given this opportunity to be examined, they will neglect the subjects in such a way as to do injustice to him and harm to themselves. It may seem hard to tell him that the apparent force of these arguments is based upon an overvaluation of the usefulness of his

work to boys and girls who are going to college. Yet I believe this to be the truth; and if it is truth, it should be told plainly.

I am not underrating the importance of these things in the scheme of secondary education. For the pupils who are going directly from the high school into practical life study of history and natural science is indispensable. Most of these pupils must get their knowledge of these subjects then, if they are to get it at all. For those who are going to pursue these studies afterward, on the other hand, such preliminary acquaintance with history and with science does not take, in any adequate degree, the place of language or of mathematics. History and natural science are studies which mark the culmination of an educational course, and which, if overdeveloped far before the close, have a tendency to weaken rather than to strengthen the student's powers of application. If by including these things in the examination system we give an artificial stimulus to their pursuit by boys or girls who are afterward going to college, I believe that we delay the advent of a reform in our school system which is of vital importance to us all. That reform will consist in the separation of our classes, both in the grammar schools and in the high schools, into groups that are about to finish their school days and groups that are preparing to advance farther.

In almost all our previous groupings we have tried to classify pupils on the lines of their different tastes, real or supposed. There is a great deal to be said in favor of a different system, which should classify them on the basis of the probable duration of the studies. It is a false idea to assume that those things which are taught to the students whose courses near their end are thereby cheapened or made inferior in value; and it is a yet worse mistake if, in the effort to avoid such cheapening, we put them into a place where they do not really belong. Our system of secondary education has reached a point of achievement where it can stand on its own merits. Those in charge of it recognize that they have outgrown the stage where their best usefulness was found in being mere preparatory schools. Let us emancipate ourselves from a set of ideas which are but the remnant of a state of things which we have now outgrown. Thus, and thus only, shall we obtain the best preparation for college, and the fullest development of the value and freedom of our secondary education.

*A REPORT ON MANUAL TRAINING IN THE DETROIT
ELEMENTARY SCHOOLS, WITH A DISCUSSION ON THE
DISCIPLINARY VALUE OF MANUAL TRAINING*

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Among the many definitions of "education" that we find in current educational writings there is none that expresses one phase of the issue

more definitely to my mind than one by Professor James in which he says that "the aim of education is to make useful habits automatic." Habits of action, habits of thought, and habits of feeling are all included in this definition, the highest powers as well as those usually considered on a lower level. In so far as we are able to develop vigorous, useful habits in our pupils, in so far are we able to make them happy, useful citizens. We are molded by our experiences to the extent that the habits formed practically control our whole conscious life; or, to quote Dr. Carpenter:

The importance of rightly directing the habits of thought and feeling during the whole stage of bodily growth comes to be still more apparent when we regard those habits as really shaping that mechanism whose subsequent action mainly determines our intellectual and moral character, and consequently the whole course of conscious life.

The aim of every subject in school is the development of habits of reaction. Any particular bit of knowledge is simply a power to react in the proper manner in the presence of a certain stimulus. How does manual training, as an agent for the formation of these habits of reaction, differ from the more theoretical subjects of the curriculum? This difference lies in the character of the reaction that takes place. There is no mental activity entirely void of the motor element, but the reactions may be of a more or less evident nature, or even entirely below the level of consciousness. It is this fact that will help us to distinguish a difference between manual training and the other studies of the curriculum.

In studies where the object is chiefly the acquisition of particular knowledge the motor reactions are not in evidence. Take history, for instance. The accumulations of historical data imply no necessary reaction for the time being; they prepare the student for possible reactions in the future. In arithmetic the process implies a motor reaction in the solving of the problem, but except in so far as the writing of the figures is concerned, it is a purely mental reaction, a reaction thru processes of association. This fact is characteristic of all the theoretical subjects taught in school. The reaction taking place is principally a purely mental process, anticipating similar reactions in the future. In other words, it is not learning by doing, but a storing-up of ideas by means of sensory impulses accompanied by processes of association.

The group of subjects to which manual training belongs, on the other hand, is characterized by a result in the form of necessary immediate reactions appearing as contractions of various muscles or groups of muscles. These subjects, besides manual training, are physical training, art education, and penmanship. As far as the physical processes are concerned, each of these three latter subjects aims at some special results characterized by the processes involved: gymnastics, the physical training of the organism; art education, the inculcation of ideas pertaining to art, such as form, proportion, beauty, etc., besides the special training of the hand

in the elements of some of the decorative arts ; penmanship, the training of the hand in reproducing the letters of the alphabet.

The specific purpose of manual training, on the other hand, is not the inculcation of some special power in using the scissors, the plane, or the saw. Our aim is not the development of technical skill as a preparation for a special trade, but we use these processes of construction with the broader aim of general training. The aim of manual training, expressed in a concise form, is the development of useful habits of a general nature.

It is true that every subject has in the same sense a disciplinary value, but as this is the characteristic feature of manual training, it should be particularly emphasized in relation to this subject.

The fact of repetition is admitted to be the cornerstone of all theories of development. Repeated processes in any one particular field are sure to lead to the development of habits.

In every good manual-training lesson the following processes are repeated: (1) objectifying of mental images; (2) muscular activity of the hands and arms; (3) exercises implying order and neatness; (4) attainment of accurate results; (5) prolonged concentration of attention; and (6) final success in accomplishing the task in hand. The repetition of these processes must lead to the development of the following habits: (1) thought-expression, giving unity and definiteness of mental content; (2) muscular control; (3) habits of order and neatness; (4) habits of accuracy or truth; (5) habits of perseverance; and (6) habits of confidence or self-reliance. Another result of the lessons in manual training is habits of an ethical content.

I have tried to summarize the aims of manual training and the conditions for reaching these aims in the following synopsis:

A SYNOPSIS OF THE AIMS OF MANUAL TRAINING

PROCESSES	RESULTING HABITS	CONDITIONS FOR THEIR DEVELOPMENT BY MEANS OF CONSTRUCTIVE WORK
Objectifying of mental images.	Thought-expression giving unity and definiteness to mental content.	A resulting product representing the mental image. Variety of material.
Acts of service.	Habits of an ethical content.	A useful article the product of the constructive exercises.
Exercises involving muscular activity.	Muscular control, skill.	Variety and repetition of technical difficulties.
Occupations giving opportunity for actions involving the elements of order and neatness.	Order and neatness.	A place for everything and everything in its place.
Prolonged efforts crowned by success.	Perseverance.	Attractive models, interest, accurate work.
Successful efforts in reaching accurate results.	Accuracy or truth.	Careful progression of the exercises.
Final success in various exercises.	Self-reliance	Never to ask a class to do what it cannot do well.

Let us now consider more in detail the conditions for the development of these habits :

1. *Thought-expression*.—Manual training is of vital significance as a means of expression. Such materials of construction should be used as will facilitate the objectification of the pupils' thoughts. Thought and expression are practically one in the mind of the young child ; hence the importance, at this stage, of furnishing every possible means of expression.

2. *Habits of an ethical content*.—Manual training should be instrumental to acts of an ethical nature. A little boy in his manual-training lesson has succeeded in making a calendar-stand. He is happy because he has accomplished something which now becomes his own. The next question with him may be : "To whom shall I give it ?" Who is nearer than his father ? Observe this child when he reaches home. His happy countenance tells us what pleasure he finds in giving this product of his own activity to his father. Acts of this kind must be the raw material out of which the habit of service is developed. He is happy in doing the act. It may be very insignificant in itself, but it is of the right sort. He derives pleasure from right doing, and this pleasure, this interest, this desire, when leading to action, is our moral will. By using as models articles of apparent use to the pupils, manual training may prove very effective in this respect.

3. *Habits of muscular control*.—We should use models requiring for their construction a variety of muscular movements, with sufficient repetition of each, in order to make them a permanent content in the form of a habit.

4. *Habits of order and neatness*.—The manual-training teacher should insist that the pupils take the work seriously, use the tools and instruments with care and appreciation, and leave them at the end of the lesson in an orderly condition.

5. *Habits of prolonged concentration, of attention, or perseverance*.—The condition for the development of this habit is the proper progression of the exercises, so that they at every stage call into action the very best effort that the pupil is capable of. In the interest of the best results in this respect, the pupil's motive for this extended effort should be interest in the activity itself or its results.

6. *Habits of accuracy or truth*.—Never to ask a class of pupils to do what they cannot do well, together with insistence upon accurate work, are the conditions for the development of these habits. A pupil is accustomed thru the manifold exercises in cardboard construction and wood-work to reach a certain degree of accuracy in his efforts on the different models. What influence is this discipline likely to have upon the pupil ? In the first place, he is taught that four inches is four inches, and not a sixteenth more or less. This consciousness that only what is right is right, and that something only approximately true is wrong, will influence his work in every line of activity.

Why should not this clear consciousness of what is right and wrong in the material world be carried over into the moral and ethical field? Is not a pupil who has been accustomed never to hand to his teacher a model as true that is not true, after several years of similar experiences, likely to insist upon truth in other relations also?

7. *Habits of self-reliance or confidence.*—Condition: Never ask a class of pupils to do what they cannot do well. Every individual effort which succeeds in a certain field will add to the consciousness of power in that field. By a certain arrangement of the exercises a boy is able to get high credit for his work. He gets the approbation of the teacher, and, furthermore—this is the stronger factor—he sees for himself that he has been able to do a certain task well. These experiences are repeated time after time. Every one of these successful efforts will add to his consciousness of power in the field in question; in other words, it will add strength to a habit under formation, the moral habit of confidence, based upon power.

Manual training is well adapted to further the development of this habit, because the success of the effort is apparent to the pupil himself. He will not have to be told by the teacher, as the case is in most other subjects. I look upon the development of this habit as one of the chief ends of manual training.

It is evident, however, that this habit of confidence is as many-sided as there are fields of activity. Manual training will arouse confidence in one's power in anything where similar difficulties are present. Success in arithmetic will develop confidence in one's power in solving arithmetical problems, etc., but we can claim for manual training, however, a wide range of application in this respect, on the ground that there are common elements in all fields of manual activity. And in so far as these common elements exist, the confidence gained thru a systematically arranged course of manual training can be carried over into other, related fields of activity.

This qualification applies to all the other habits mentioned above. We do not by any means claim general training as the result of manual training, except in so far as related elements exist in the different fields of activity.

The aim of an educational subject decides the methods to be employed. On the basis of the previous discussion we may now arrive at some general conclusions in regard to the teaching of manual training, the progression of the exercises, etc.

The progression of the exercises in a course of manual training should be such as to manifest to the pupil a constantly growing power, this being the condition for a growing interest. We should never ask a pupil to do what he cannot do well.

His work in manual training should be a line of continuous victories

over difficulties gradually increasing, but not surpassing his power at any stage. Continued failure is worse than no attempt. Success is a greater factor in the educational value of manual training than in any other subject. If we ask a pupil to make a box of cardboard of a certain size, he should be prepared for that model thru previous simpler exercises. The remark that a child cannot read perfectly the first time a book is put into his hand, or make a perfect sketch at his first trial, has no application to manual training. Our aim is not the development of technical skill, but the development of habits. The fact that a boy cannot read well the first time he opens a book is no excuse for accepting an imperfect model as the earlier results in manual training. If a boy does not succeed in cutting his card to accurate dimensions, in the fourth grade for instance, he has lost the vital educational results of the exercise. Continued failure in this respect will have injurious effects upon the child's development. The habits we have enumerated above will fail to develop, and in place of them he will acquire habits of carelessness, inaccuracy in its moral and actual significance; moreover, he will lose confidence in the use of his hands. Manual training under such conditions becomes a farce. The very fact that pupils are making certain articles out of wood or cardboard does not make their activity manual training. Above all other things I look upon *thoroughness* as the vital end of our instruction in manual training.

Accuracy, as we have noticed, is an element that enters as a condition for the development of the most important habits resulting from manual training. It is therefore of importance to illustrate what this term "accuracy" implies during the different school periods.

In the previous discussion the word "accuracy" has been applied to two different aspects of manual training, namely: (1) accuracy of expression; (2) accuracy of measurements.

If a primary class in studying the baker's trade is making, as a matter of illustration, a baking-pan of paper, we expect this model to give a comparatively exact illustration of the shape of this utensil, so that a clear and exact idea remains as the result of the constructive exercise. This kind of accuracy does not include measurements; it is simply accuracy in expression. On the other hand, if the pupils in a grammar class are making a box, the drawing of which calls for a certain length, we expect the pupils to make a model of the length called for by the drawing. This I have called accuracy of dimensions.

It is only accuracy of expression that we should strive for in the first three years in school. This, besides *neatness* in arranging and planning patterns and carefulness in cutting, should be the only requirements of the work in the first three grades in regard to accuracy.

In the fourth grade another element enters; that is, accuracy of dimensions. The idea of measurements should there be introduced. In this grade the pupils are perfectly able to use the rule with absolute accuracy,

and I believe it should be insisted upon. That is, if a model is to be $4\frac{1}{2}$ inches long, there is no reason why not 85 per cent. of the pupils should get it this dimension, and not $\frac{1}{8}$ inch more or less. We should never, however, ask for accuracy before the pupils are properly prepared for such exercises as imply this element; but at the age of nine it does not seem too extravagant to expect a pupil to locate a point a certain distance from another point, when the process simply means putting the pencil point opposite a certain figure. Neither are the cutting exercises beyond the pupil's power, if cardboard is used as the material of construction.

Just as we insisted upon the accuracy of expression during the first three years in school, we should thereafter insist upon accuracy of dimensions or measurements. Later in school life we introduce accuracy of a higher grade or nature which will call into action the æsthetic ideas of proportion and beauty. Accuracy in one sense or the other is the keynote to the disciplinary significance of manual training.

This discussion on accuracy will again emphasize the necessity of careful progression of the exercises. At no stage of the work should we ask a class of pupils to do what they cannot do well.

I look upon it as unfortunate that this principle is being often violated.

TABLE OF STATISTICS OF MANUAL TRAINING IN THE DETROIT PUBLIC SCHOOLS

GRADE	KIND OF WORK	TEACHER	NUMBER OF MODELS	PUPILS	INSTRUCTION PER WEEK—HOURS	PERIOD OF EACH TEACHER	PUPILS IN EACH CLASS	EXPENSE OF EQUIPMENT	YEARLY EXPENSE PER PUPIL	SAME INCLUDING TEACHER'S SALARY
Fourth	Cardboard construction	Grade teacher	40	Boys and girls	1	1	50	\$35	\$0.06	\$0.06
Fifth	Cardboard construction	Grade teacher	35	Boys	1	1	25	None	\$0.08	\$0.08
Sixth	Knife-work in cardboard and wood	Grade teacher	25	Boys	1	1	25	\$15	\$0.12	\$0.12
Seventh	Wood construction	Special teacher	15	Boys	$1\frac{1}{2}$	15	25	\$400	\$0.35	\$2.92
Eighth	Wood construction	Special teacher	12	Boys	$1\frac{1}{2}$	15	25	None	\$0.45	\$3.02

What has been said above in regard to accuracy of dimensions applies especially to the regular series of models that is followed by all the pupils

in the class. More freedom should be given to the pupils in their work on models of their own invention. Independent activity of this nature should be encouraged, and, if accuracy has been attained on the regular models, the pupils will be guided by the habits thus formed in this independent work.

In the chart of the statistics of manual training in the Detroit public schools you will notice that we have special teachers for the boys only in the seventh and eighth grades.

In the fourth, fifth, and sixth grades the work is in charge of the regular grade teachers, each class of boys receiving their instruction in manual training while the girls have their lesson in sewing from special teachers. The course, as you notice, is cardboard construction in the fourth and fifth grades, and knife-work in cardboard and in wood in the sixth grade. I instruct the grade teachers in the different exercises and illustrate the method of teaching the different models, besides emphasizing the aim of the lesson.

In my first talk to new teachers I spend quite a good deal of time defining the aim of manual training as definitely as possible, besides giving as many lessons as my time permits to the different classes in the presence of the teachers. With this assistance I believe the grade teachers can teach the boys manual training just as well as, or better than, special instructors. In the first place, they know their pupils; secondly, they can correlate the instruction in manual training with that of other, related subjects, thus helping to make this new subject an integral part of the curriculum; and, thirdly, they have had extensive experience in teaching. These three conditions are not so easily fulfilled by a special teacher, and they are vital conditions for the success in teaching manual training.

THE PROGRESS AND AIMS OF DOMESTIC SCIENCE IN THE PUBLIC SCHOOLS OF CHICAGO

HENRY S. TIBBITS, PRINCIPAL SPRY SCHOOL, CHICAGO, ILL.

The teaching of cooking and sewing, for local reasons called "household arts," was introduced into the Chicago public schools two and a half years ago. A special committee of five members of the board of education inspected at the Hammond School the teaching of these subjects which they had permitted at private expense. Twenty-five thousand dollars was appropriated for providing equipment and initiating the work for its first year. Of this but \$18,500 was used. Equipments for cooking were placed in eleven schools, and have been placed in the new Dewey School. Each of these has been a center to which several neighboring schools have sent the girls of the seventh and eighth grades for cooking lessons, one period of an hour and a half each week. The number of

pupils taught at a center averages 450. In other schools, not contiguous to cooking centers, eleven teachers of sewing have given lessons of an hour and a half each week to the girls of the seventh and eighth grades, the teachers being peripatetic.

November 1, 1900, 4,372 pupils were receiving instruction in cooking and 4,853 pupils in sewing, or 9,225 out of a total of 13,000 girls of those grades.

The teachers are required to be high-school graduates who have taken a course in domestic science in some secondary institution. This secures an able corps of teachers, several of whom have been called to more lucrative positions in other cities.

The courses of lessons in both cooking and sewing are eclectic, having been arranged by the respective associations of teachers. They have been revised and modified as experience has dictated. The cooking lessons are distinctly a plain-food course—lobster salad and charlotte russe being omitted. Each pupil cooks the prescribed food, and either eats it or carries it home. The proof of the pudding is in the eating. The success or failure of a lesson is immediately apparent. Much effort has been given to securing the practical helpfulness of the lessons of the day in the home, where a failure is analyzed and perplexities are dissolved. The grade teachers have often wisely correlated with cooking, physiology, nature study, and some topics of practical arithmetic.

Instruction in sewing is practical in a similar way. A study of the nature of cloth is succeeded by the various processes of its adaptation to clothing. Finally, simple garments are made by the pupil for her own use. The related subjects of invention, growth, and manufacture of cloth materials, fibers and fabrics, good taste in dressing, shopping, and laundering, are developed.

Sociologically considered, the church industrial schools have been vastly improved upon in the public school, where not simply the *poor, good* girl is taught sewing, but *every* girl in the schoolroom, rich or poor, open-minded or clam-like.

The cost of domestic science is \$1.81 per pupil per year; the cost of manual training is \$3.34; the cost of German is \$4.86. This is based upon the average for the past year. These figures are significant for comparison either with other studies or with domestic science in other cities. The salaries of teachers of cooking and sewing in Chicago are the same as those of grade teachers, ranging from \$500 the first year to \$900 for the tenth year. Much of the success of the teaching of cooking depends, of course, upon the method. It is distinctly a laboratory subject, and, like all other laboratory work, is vastly superior when individual equipment is supplied. Hence we have the individual sets of dishes and a stove for each pupil. By using small portions, when they suffice, the expense for material is inconsiderable, even with individual instruction.

One and one-fourth cents per pupil per week is the allowance in Chicago. While individual desires will ever increase the cost of equipment, it is possible and wise to equip for the teaching of cooking upon just as accurate and scientific principles and practical use at the expense of \$150 for a class of twenty-four as at the rate of \$500.

One of the noblest movements of the present day is that which would magnify the home. The chair, bright light, and gorgeous embellishments are a more harmful element in the saloon than its alcohol. If the honest arts of the home may be made less irksome because they are better understood, and more attractive because they are more artistic, we shall have come to the root of this matter. The evening meal of the factory hand may be made more tempting than the lunch counter, and the clothing of the family, as well as the arrangement and tidiness of the living-room at home, may be as attractive as the gilded home of vice. Domestic science may become the unsuspected, and yet not the least efficient, enemy of the saloon.

Instruction in cooking in Chicago is well amplified in its scientific relations. The simple biology of yeast and vinegar is developed. A careful classification of food values as fats, proteids, carbohydrates, mineral matter, etc., accompanies the study of the composition of the human body and its food requisites. The dietetic principles of suitable proportions of these food elements are given, and the complementary nature of certain foods is shown. The reasons for the use of hot or cold water; the relative merits of boiling or baking, of the raw and cooked states, of acid and base—such scientific data, adapted to the age and knowledge of pupils, enter into cooking lessons and furnish the science to enrich the household arts. The dealing with material things introduces elements of accuracy and order not found in the strictly intellectual subjects. Just as in all forms of manual training, small groups of muscles are co-ordinated and deft manipulations mastered, thus realizing complete and extended reactions.

The useful hints, skilled methods, and adept ways acquired by the teachers in their special training are imparted in turn to the pupils, and, as in all education, the experience of the race is placed at the disposal of the child. The girl accustomed to black bread and beer for dinner, to poorly cooked food wastefully used, learns to prepare palatable dishes from economical materials. It is difficult to measure the beneficent practical value of domestic science in these humble homes. It is a theme for eloquence, and insures permanency to the subject of study, no matter how much it may be temporarily buffeted about as a fad. To the girl of luxury, with servants at home, whose life may be distinctly social, frivolous, and gay, domestic science yields an appropriate sense of the importance of the human body, its nourishment and clothing—thus introducing a more harmonious and reasonable life. In the wealthier

school districts of Chicago domestic science has been as welcome to the girls as in the districts of humbler homes.

It has never been seriously charged or believed that domestic science demeans the course of study, or is a preparation for domestics. We teach cooking and sewing at the age when pupils unconsciously learn that honest toil is not disgraceful. Mrs. Richards found in Boston that fourth-grade girls gladly received lessons in scrubbing and cleaning which older girls disdained.

The impotency of the woman who says she cannot sew on a button or mend a rent is a disease peculiar to modern urban life. The young bridegroom may profess to the wife who forgets to salt her first oatmeal that he likes the oatmeal very much better that way; but sentiment does not blossom freely from a ground of indigestion.

Aside from the *general* effects of domestic-science training, its *specific* effect, upon every third or fourth girl of distinctly motor predominance, is marked and extremely salutary. Every teacher of manual training, cooking, or sewing will bear witness to the aptitude of certain otherwise backward pupils in these studies which involve the more extended motor reactions. The course of study is thus flexibly adapted to the predominant activity of the pupil.

The teaching of sewing and cooking may be considered again in the light of school occupations. While they train hand and eye, there is ever present a directing mind having in view a distinct end. "I made this loaf of bread." "I planned and sewed my own dress." The peculiar advantage of cooking and sewing as school occupations is that they each parallel practical arts at home. The home is the practice department for the lessons of domestic science. No need can be more evident than that of food and clothing. It springs from a fundamental instinct. Few desires are more strong than to be well fed and well clothed. Reason gives as a secondary basis the desire for long life and a life of bodily comfort. Theoretically this gives us a most substantial basis for interest. Practically it proves a true basis, for pupils of cooking and sewing in Chicago never ask to be excused from the studies because they dislike them. There is increasing call for the introduction of the studies in the schools which do not now have them. Despite the disadvantages of being compelled to walk a long distance from the home school once a week in variable weather, the girls who study cooking are enthusiastic and regular in their attendance, altho the subject is quasi-optional and no other subject compels such travel. The interest is sufficient to overcome all reluctance to preparing material and cleaning utensils. An interest in digestion becomes an all-around satisfied interest when the pupil actually cooks and eats and comfortably assimilates the food of which she has just been studying in her physiology.

Domestic science is an integral part of any scheme of sound correlation.

If the school of the future does not bend all subjects into a mechanical circle of correlation, it will certainly harmonize subjects, multiply interrelations, and remove many of the present partitions. It will find its basis of interest largely in the occupations. Cooking and sewing are occupations closely related to the life of woman.

The educational commission of the city of Chicago in 1899 indorsed domestic science, sewing, and cooking for the curriculum of the Chicago public schools.

The objection to special teachers for special subjects, so called, whether German or Latin, manual training or cooking, singing or drawing, is overcome in the face of the diversity of modern life. With the great variety of specialists in the medical profession, for example, can it be reasonably demanded that there shall be but one kind of teacher?

A very considerable portion of the business world is occupied in supplying the food and clothing for mankind. Hence the relation of domestic science to the economics of the world. Scientists inform us that man does not live as long as he might in comparison with the life of animals. The relation of malnutrition and indigestion to the harmful effects of foods and to the shortness of human life is clear. The theory may be boldly stated that, if man ate wisely appropriate food, he would live longer and more happily. It is the aim of teachers of domestic science to teach and bring into practical use knowledge of proper food and the best methods of preparation.

Domestic science has been styled a fad by a certain portion of the public, along with drawing, music, physical culture, manual training, and German, and has endured with them the storm and stress period in Chicago. One week ago the board of education raised the salaries of teachers of Chicago, as one expressed it, "scraping together" all the money they could for the teachers. At the same time they scraped off two months of the term of domestic science, providing this year for only eight months' instruction. This will be restored; but shows the necessary nursing which the subject requires. The most helpful sign of the progress of domestic science in Chicago is the increasing interest in the subject among teachers and principals, and especially among the pupils. It is easy to predict that another generation will take a more generous interest and largely increase the teaching of this subject.

MANUAL TRAINING IN THE MENOMONIE PUBLIC SCHOOLS

SUPERINTENDENT JUDSON E. HOYT, MENOMONIE, WIS.

I am requested by the president of this department to present a brief paper which shall constitute a "Report of Work in Manual Training in the Menomonie Public Schools."

Following the interesting and instructive papers from two cities which nobody has difficulty in locating on the map, the only excuse which a somewhat obscure town of less than six thousand inhabitants has for occupying time in this important session is that it has been the fortunate subject of a rare opportunity and the scene of a relatively extraordinary educational development.

In this attempt at exposition there is room for grave doubt as to whether by mere brief statement of the nature, aims, and extent of the general scheme, and by outlines of the manual-training courses, unaided by pictures of appliances, or exhibits of pupils' products, showing subject-matter and quality of work, we shall be able to convey such a true and adequate conception as will seem to justify the prominence that is generously accorded to this enterprise.

Menomonie is the county seat of Dunn county in the northwestern part of Wisconsin, and is on the main line of the Chicago & Northwestern Railway between Chicago and St. Paul, sixty-five miles southeast of the latter city. In 1846 Mr. John H. Knapp and Captain William Wilson, who with their families were the first permanent settlers, laid here the foundations of a lumber-manufacturing enterprise which has grown into the now extensive, wealthy, and widely known corporation, the firm of Knapp, Stout & Co. This business establishment was the nucleus of the town, and still remains its leading industry, tho others of considerable proportions have in recent years sprung up, which will insure for the town permanence and growth beyond the time of inevitable extinction of the forest wealth.

Over a period of thirty-eight years, from 1852 to 1890, the school system of Menomonie had a gradual growth from a one-room school, which was established and for five years supported by or under the management of the company, to a city system occupying five buildings in different parts of the town, having twenty-four separate schools and employing twenty-seven teachers. In 1890, the year of the introduction of manual training, there was a total population in the city of 5,500, a school population (ages between four and twenty years) of 1,750, and an enrollment in the schools of 1,350, of which 109 were in the high-school department. In this earlier period only an organization and curriculum of the usual type were aimed at. Free-hand drawing and music were the only special branches.

At the present time the population of the city is 5,650; the school population, 2,250; the total enrollment of pupils, 1,650, of which 148 are in the high school. Nine buildings, providing for twenty-nine separate schools, are occupied and forty-seven teachers employed, of whom five are teachers of special subjects.

While in this ten-year period little change has taken place in the total population, and the ratio of school population to school enrollment

remains practically the same, great and fundamental changes, amounting to a complete revolution, have taken place in the aims and character of the instruction thru the enlargement of facilities and teaching force, and the incorporation of the ideas of the new education as these are embodied in the kindergarten and the manual-training school.

The school system now consists of a kindergarten system of three kindergartens, which, with the primary schools of the city, is under the immediate care of a supervisor, who also is head of the kindergarten and primary training school; of twenty-five lower-grade schools; of a high school which offers four four-year courses; and of the manual-training school which, having, as now conducted, no separate student body, belongs to the school system as a whole and is an aggregation in one building of the rooms, appliances, and instructional force for the teaching of the purely manual, industrial, and art phases of the manual-training courses, together with the special knowledge-matter on which these are based.

To Hon. James H. Stout, a resident member of the firm of Knapp, Stout & Co., a gentleman of large means, philanthropic disposition, and deep interest in all forms of educational effort, the city of Menomonie is indebted for its initial prompting, as well as the provision of the material means for the introduction of both manual training and the kindergarten work into the public schools. We have here an instance of a people being led out into a way which they knew not, which they did not choose originally for themselves, by the deeper insight, strong purpose, and wise leadership of a single public-spirited individual, supported by a liberal use of private funds.

The first step toward manual training was taken when in October, 1890, Mr. Stout made to the board of education the following proposition:

I will place upon the school grounds, in a place to be designated by the board of education, a building of proper size and kind, furnished with all the equipments necessary for the instruction of classes of boys and girls in the subjects included in the first-year course in manual training. I will also pay the salaries of the necessary teachers, the cost of all necessary materials and supplies, and all the contingent expenses for three terms or for a time equivalent to three school terms, except such a part thereof as shall be paid by five hundred dollars which is to be provided by the board of education.

The proposition was of course accepted, and the building and equipments were provided. The work of instruction was begun, in high-school classes, in January of the following year.

So successful and popular did the manual-training work, in all its phases, soon become, and so cordially was it supported by the people, by whom, after the first year, funds were supplied for the running expenses, that Mr. Stout was encouraged to provide the school with a more ample and convenient building and a whole complement of furniture and equipments, which should enable the extension in due time of manual-training

courses, for both boys and girls, over the entire lower grades and high-school period.

The test of the popular appreciation, as well as of Mr. Stout's devotion to the enterprise, came when, after four years of the use of this second building, it, together with the large central school building on the same grounds, was destroyed by fire. There was no wavering on the part of the people. They appropriately indicated to Mr. Stout, by a memorial numerously signed, their recognition and appreciation of the benefactions already received, their wish that the provisions for manual training might be restored, and their ready willingness to carry still, as they had hitherto done, the increased taxation necessary to provide for the running expenses of the work. Mr. Stout, on his part, awaited only an unmistakable assurance of this wish and attitude.

The great opportunity was now at hand for planning two buildings, each the counterpart of the other, which together should embody the material arrangements and appliances corresponding to a broad scheme of elementary and secondary education in accordance with approved modern conceptions. One of these buildings was to house a gymnasium, a kindergarten, nine lower-grade schools, and the high school, providing the latter amply with library, recitation rooms, and laboratories. The other was to afford facilities, as its forerunner had done, for extensive courses in manual training, including, for boys, free-hand and mechanical drawing, sloyd, cabinet work, wood-turning, pattern-making, molding and casting, forge-work, and machine-shop practice; and, for girls, drawing and art work, sewing and dressmaking, cooking and serving, house-keeping and laundry work.

Liberal plans were amply realized, and the buildings, with their furniture and equipments, stand today the wonder and delight of every intelligent visitor, and a model for progressive schoolmen. Detailed description would not be in place here, but some idea of their extent and quality may be obtained from their cost. Upon the central school building the city has expended \$60,000, and Mr. Stout has made additions in various forms amounting to fully \$25,000, while the manual-training building, with its furniture and equipments, represents a cost of over \$100,000, which was, of course, provided wholly by Mr. Stout.

The aim of the undertaking in the Menomonie schools has been from the outset to provide manual training and art education in suitable courses to all pupils, in and from the kindergarten thru the high school, as a collateral and complement to the usual oral and text-book instruction, to the extent of making some exercise in *doing* a part of the daily experience of every pupil, and for the purpose of securing to the pupil all the various advantages which these courses are adapted to give.

Both boys and girls are provided for. The artistic and educational conceptions of manual training have been kept in ascendancy over the

utilitarian and technical, tho the claims of the latter have not been ignored. In the lower grades the work is required. In the high school it is professedly optional; but, with only an occasional exception, the associated manual-training branch is elected. Three academic subjects and one fifty-five minute manual-training period per day constitute the standard amount of work. While it is possible for a pupil in a regular high-school course to get, within school hours, more than this allotment, still the manual-training subjects are held quite strictly as collaterals to academic work. However, separate arrangements are made for pupils who for any reason have abandoned their academic studies, and for young men and women from within or without the city, by which they are enabled to devote their time quite exclusively to manual-training subjects, and so get a more specialized and technical training.

The courses in the several manual-training subjects have from the first undergone a progressive development, and at some important points are still in transition. But the place of each process, and the kind and amount of work to be expected of the pupil under the particular conditions which obtain at our school, have been approximately settled. No claim of originality is made; no presumption is indulged in that a pace has been set which any other school should follow. We have simply selected from the common stock of manual-training knowledge and usage the kinds and amounts of work that are adapted to our needs.

Time will not permit such a detailed statement of our courses as will reveal whatever may be distinctive, but the following outlines may be of interest:

THE MANUAL-TRAINING COURSES

I. IN GRADES BELOW THE HIGH SCHOOL

A course in free-hand drawing, for boys and girls alike, extending over the entire period from the kindergarten to the high school, is taught by the regular teachers in the several schoolrooms, under the supervision of the art teacher of the manual-training school. It is based on the art idea, and has little direct reference to construction, except that in the first four years, before other forms of manual work begin, it is made especially full in exercises involving manipulation of materials, such as stick-laying, paper-cutting, clay-modeling, paper-folding, cardboard construction, brush-drawing, color-painting, and basket-weaving. In the later years this course gives itself wide latitude in the choice of mediums, processes, and subjects; uses pencil, charcoal, pen-and-ink, and brush, in sepia and in color. It concerns itself in regular sequence, frequent recurrence, and in due degree with nature study, model- and object-drawing, illustration, measurements and working drawings, light and shade, historic ornament, the planning of ornament, conventionalizing of natural forms, water-color painting, design, and perspective.

This may seem an ambitious and too varied program, but in the test

of use under good teaching it yields a very considerable insight and skill, and develops interest and real artistic feeling.

The course in plain sewing, for girls, begins in the fourth grade and runs, at two periods of thirty to fifty minutes a week, thru the fourth, fifth, sixth, and seventh grades. All pupils above the fourth grade, except those of one remote school, come to the manual-training building for this work. The usual course in plain sewing, in which each new exercise isolated for the purpose of teaching is followed more or less closely by application in a completed whole, is taught with much insistence on accuracy and neatness. This practice is accompanied by the presentation of much information matter about fabrics—their raw materials, manufacture, characteristics, and utilities. The seventh year is given almost wholly to garment-making.

The sewing work is interrupted at this stage in order that the eighth-grade year may be given to the introductory stage of a three-year course in cooking, serving, housekeeping, hygiene, and sanitation.

The aim of the instruction in this year is to give to all girls, especially to those who will not go on into the high school, the requisite knowledge of food-stuffs and food classes, of fundamental processes, and a degree of skill in their use, which will enable the successful preparation of the common foods.

For boys, the work in the grades consists of a course of bench-work based on the sloyd idea. This begins in the fifth grade with a series of exercises in whittling and the making of surface forms in thin wood. It passes on to the use, by gradual introduction, of all the usual tools, in the execution of a graded series of exercises as represented in models, involving form-work and joinery, in increasingly complicated, completed products.

The lay-out of the model to be made is placed before the pupil in blue-prints or blackboard sketches, and the work demonstrated when desirable. The reading and making of working drawings are taught in this connection, but little of the pupil's time is applied to the making of those which he actually uses. In addition to the standard series of models, which is not held to as a *sine qua non*, the boy is given large opportunity to make things in which he is himself interested, and to express himself in plan and style of work.

The time allotment of this course is two fifty-five minute periods per week thru the fifth, sixth, seventh, and eighth grades.

II. CONTINUATION OF THE MANUAL-TRAINING COURSES IN THE HIGH SCHOOL

The drawing courses.—Drawing has thus far been taught in the several schoolrooms, substantially the same work being given to both boys and girls. When the high school is reached, mechanical drawing comes into prominence as a separate subject, and claims the time of the boys, and

such of the girls as are specially interested. The girls as a rule continue in the line of free-hand drawing and art study. All pupils henceforth come to the manual-training building for their exercises.

The general aim of the art work is to educate to an appreciation of the beautiful, to stimulate the artistic and inventive faculties, and to train the eye and hand to become the ready servants of the mind in the expression of ideas. These aims are sought to be realized by surrounding the pupil with an environment of beauty in the schoolrooms, and especially in the several rooms of the art department, by a study, in connection with practice, of the principles involved in the several forms of art essayed, and of examples in curios, pictures, and casts of historic and present-day art. Relatively speaking, the school is well provided for in these directions. A rich and varied, but well systematized, course is given, which cannot be adequately represented in a brief outline.

Mechanical drawing is taught as a mental discipline, as concrete mathematics, as training of eye and hand, as the language of construction, and as technical training. That the course may be more systematic and thorough, little attempt is made at correlations with the shop-work. Exercises to give command of the instruments, lettering, geometrical problems, projections, intersections, development of surface, mechanical perspective, line and wash shading, conventional colors, are each laid under contribution, and together give a fair degree of mastery of mechanical drawing as a method and means.

Two years having been thus occupied, the remaining two years are given to applications in either of the two lines, machine or architectural drawing, with a view to the acquirement of something like technical knowledge and skill. This course is held by graduates of the school to be a most valuable general discipline, apart from the use of the attainment in practical ways. Two fifty-five minute periods a week are given to this course for four years.

The work in domestic arts in the high school consists in the continuation of the course in cooking which was begun in the eighth grade, and a course in dressmaking. Three fifty-five minute periods per week are the allotment of time in each of these subjects.

In the first high-school year a review and extension of the study of food-stuffs, of their composition, dietetic values, and proper combination, are accompanied by practice in the preparation, cooking, and serving of all the usual foods. Marketing, housekeeping, and care of laundry are engaged in, both for training and in the service of the school.

What may be regarded the refinements of cooking receive attention in the second high-school year. In addition, study and practice in planning, marketing for, and serving of meals and lunches to invited guests, and assistance in preparation of, and serving at, occasional banquets, afford attractive and valuable experience. Hygiene and home

sanitation, invalid cookery, and the care of the sick and injured receive a liberal allotment of time proportioned to their importance.

The course in dressmaking runs thru the third high-school year. In this instruction effort is made to base the work on principles, and to give a mastery of processes which will be available beyond the limited amount of practice that can be had under the eye of the teacher. Planning, selecting of materials, measuring, the making and use of patterns, use of models, fitting, trimming, and other like means, receive careful teaching. Discussions of the characteristics and suitability of materials for various uses, of comparative cost, of hygiene and good taste in dress, and other relevant topics, accompany the work as occasion requires.

The domestic-arts courses are well taught, are attractive to pupils, and command the confidence and cordial support of the mothers and all patrons of the school.

The mechanic-arts courses are, with the exception of one sloyd class, all taught in the manual-training building. Each has a time allotment of three fifty-five minute periods per week.

The boy having thru his lower-grade work been confined to one shop and to a series of processes upon wood, involving the use of comparatively few tools, now upon entering the high school has opened to him quite rapidly the range of the mechanic-arts shops. He is introduced to machinery, and is subjected to the necessity of bringing his own action into correspondence with the motion of the machine.

Wood-turning is the first machine process, and upon this he spends the first high-school year.

Pattern-making, molding, and casting, in a series of alternations, fill the second year, and give the boy a practical introduction to foundry work. Casting is done in iron and brass.

The third year is passed in the blacksmith shop, where an especially well-planned course in the common processes of forging, welding, and tool construction is taught. No course in the series is more attractive to the boys or more effective as training than this.

The machine shop, into which the pupil passes for the work of the fourth year, is a model in its completeness, and in the grade of the machine tools and the thoroughness of their installment. The meager time which pupils in the regular courses can give to the work of this shop prevents full realization of the opportunities here afforded.

A period of bench-work in chipping and filing is followed by the systematic working of a series of exercises in iron and steel, involving use of the engine lathe, the speed lathe, the drill press, and the shaper. Incidentally, knowledge of the utilities and insight into the working of several other more special and complicated machines are acquired, but practice with these is left to an advanced course after high-school graduation.

The foregoing review of courses is necessarily incomplete, but it errs

on the side of omission rather than overstatement. Classes are now fully differentiated, and all the lines of work enumerated are in actual operation.

A committee of the Society for the Promotion of Engineering Education is now investigating the assigned subject, "American Industrial Education—What Shall it Be?" The preliminary report of this committee, presented in New York last July, having mentioned by name the school which is the subject of this paper, makes this strong statement: "Both the appliances and the instruction in this school are of the highest order, and the results are well calculated to astonish anyone who has never seen this system of public instruction in successful operation from the kindergarten through the high school."

DISCUSSION

PRESIDENT F. W. PARKER, Chicago Institute.—In 1883, in a basement of the Cook County Normal School, with a few rude benches and a good teacher, we introduced manual training. That was probably the first attempt to put manual training into elementary schools in this country. Manual training is not for external uses, but for internal development. In its earlier history it was begun in the high schools. Things nearly always begin at the wrong end. It is better and will be better for the children when the youngest of them can have the benefit of the right kind of manual training.

It has not been so very long since this subject was not very favorably considered by an educational body. Manual training was demolished by a number of educational gentlemen in Washington in 1884, but since that demolition nothing has flourished like manual training.

I never saw a child that did not like manual training. Boys and girls love it alike. The fundamental error (Dr. G. Stanley Hall suggested this a number of years ago, and I saw it) lies in logical sequence. This is the fundamental error in all education. What we have learned is that the child is full of activity. When children go into the shops and find that they have to do something themselves, delight seizes their souls. They take the school home with them. When education penetrates the home and when home penetrates the school, then things move on.

MR. J. H. STOUT, Menomonie, Wis.—We are not facing the conditions of today in our school work. We are looking too much to the past. We need to look to the conditions that are confronting us now in providing measures and methods in education. Among the adjuncts of the public schools there is one especially valuable, and that is the library. The traveling-library plan is an excellent one. Wisconsin has spent a million and a quarter dollars for libraries in the last year or two.

MR. BEVANS, Aurora, Ill.—I wish to speak in favor of employing useful objects in manual-training work. The boy's interest in manual training is increased if the object which he makes has a use to which he may wish to put it.

In Aurora a boy failed on a simple piece involving a principle given him by his teacher. The same boy wanted to make a bookcase. His teacher let him try, and he turned out a creditable product.

SUPERINTENDENT JOSEPH CARTER, Champaign, Ill.—There is danger now in our smaller towns, after the experience at Menomonie, of the prevalence of the feeling that, unless some rich man will do something toward manual training, one cannot do anything.

It has been my fortune to serve as superintendent in the schools of two towns, neither of which could be said to be especially well-to-do. In both of these towns something in the way of manual training was undertaken. We would teach the use of a few common tools—of the saw and the needle—and this without very much cost. I honor rich men who make manual training in the schools possible. I honor more a community which says that it ought to do these things for the children and proceeds to do them.

PROFESSOR C. M. WOODWARD, St. Louis, Mo.—I experience a deep feeling of satisfaction that the department is in such excellent temper as I find it in today. It has not always been so well disposed toward manual training. Some years ago there was a good deal of opposition to it, but now all are looking one way.

There is much more in manual training than in making carpenters and blacksmiths. It develops capability in more than one direction. Manual training has brought in a good deal. It has grown down until it meets the young children and answers their needs. One of the bugbears, as to expense, has been done away with. In St. Louis it costs 1 cent per day per pupil. Domestic science has taken on a systematic educational method, so that there is a chance of its blossoming into something of a larger shape.

I wish to testify to the interest of the children in domestic economy. In a certain colored school in St. Louis, where this subject is taught, it costs pupils 10 cents a day to get there, but the attendance in that school is the best in the city. It is easy in any community to establish manual training, if you have faith in yourself, faith in your cause, and faith in the community.

SUPERINTENDENT GEORGE GRIFFITH, Utica, N. Y.—I have thought that some figures as to the expense of conducting manual training might be interesting. For the instruction of 2,800 pupils the cost is as follows:

For five teachers - - - - -	\$4,800
For supplies - - - - -	540
For additional equipment - - - - -	99

Making a total cost of \$1.73 per pupil. The original and total cost of equipment is as follows: for two kitchens, one manual-training room, and equipment in each of four-teen ward schools, in fifth and sixth grades, \$1,744.

PROFESSOR J. H. TRYBOM, Detroit, Mich.—Both sewing and cooking may be made to serve the ends of manual training—sewing in particular. Altho the same variety of tools and materials as in wood construction, for instance, may not be possible, it can not be said by any means that the girls have not the advantages of manual training. In regarding the value of manual training, the economic side is worth some consideration. With due emphasis upon the educational side in teaching sewing, with careful progression of the exercises, and with models suitable to the age of the pupils, the aims of manual training can well be realized thru this subject.

POSSIBILITIES OF MANUAL TRAINING FOR MORAL ENDS

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I have been asked by our president to give some observations upon my work at Elmira, N. Y., covering five years as director of manual training at the New York State Reformatory, and I have consented to do so, altho my relations with that institution terminated over a year ago.

The characteristics of manual training at the reformatory, as compared

with manual training in our public-school system, arise from the fact that it was organized and operated for the special purpose of treating forms of mental and moral diseases, much as hospitals and sanitariums exist for the treatment of special maladies; and, next, that it was of value as a stimulus toward reformation for many who were not susceptible to other agencies. Manual training as a reformatory agent became acceptable only after searching investigation covering numbers of inmates of varying ages, nationalities, and degrees of intelligence, and after extended observation covering a long period of time.

In order that you may fully appreciate what influence manual training had upon these specially abnormal pupils, I shall define somewhat the characteristics of the subject, his environment before and during confinement, and his relation to society after his release. Investigation shows that of all persons committed to reformatories about 85 per cent. have not had the advantages of good home training during the formative period, or of even respectable parents. These spores of society have been left to roam *ad libitum*; many could not read or write. Before conviction for felony they have figured in juvenile crimes cataloged as misdemeanors; many have spent the larger part of their lives in houses of refuge, homes for boys, boys' farm schools, or like institutions. In time these boys have grown into young manhood without that training which should fit them for the duties of American citizenship. As a result of their environment they have learned to be deceptive, to misrepresent, to dissemble, to be defiant, and, what is worse, to feel that they have been segregated because of their heroism; for it is a peculiar trait in the character of the criminally abnormal classes to feel that all society is wrong; that they are sufferers at the hands of scheming speculators in human will and sovereign freedom. The state of New York maintains juvenile reform schools. Catholic and Protestant societies are sponsors for similar schools. Into these places the spores of infected humanity are crowded; but these schools do not change criminal habits or supply new motives thru well-directed self-activity. In short, they are not fitted to deal with this abnormal element; they have neither the personnel in their teaching force nor the apparatus; they are for the most part officered by men who have not been trained for this work; neither are these officers sufficiently interested in the problems of social regeneration to fit themselves for their onerous task. So these reform schools and protectorates become houses of detention rather than schools for training in the duties of citizenship. In many cases they are simply treadmills of useless routine without appliances for stimulating to strength of purpose or for developing active intelligence thru profitable industry; neither do they appeal thru the physical sensory organs to the higher self, to the end that each individual may adjust himself to the existing social laws. The real purpose of reform schools, protectorates, and reformatories should be to

suppress the disposition toward criminal habits by supplying new motives, by teaching frugality and industry, and by cultivating ideals worthy of a pure manhood.

At the Elmira Reformatory these ideals have been wisely wrought out under the direction of that seer, Hon. Z. R. Brockway. For a large number of inmates the usual industrial, literary, and civic regulations were sufficient to inspire to a more perfect manhood, and in almost all cases there has been sufficient response to these reformatory agencies to show that the discharged inmate has complied with recognized legal standards of correct living. There were, however, a number of inmates who did not respond to these agencies, and for such manual training was established, the results of which lead us to the subject of this paper, "Possibilities of Manual Training for Moral Ends."

With the knowledge gained from a wide experience with manual training in public schools, and its value as related to the problems in education, we have a basis for operation. Manual training for defectives is based on this psychological fact, namely, that for every important part of the body under control of the will there is a region of the brain from which these parts are controlled; these are known as motor centers. For instance, what we commonly call muscular paralysis is but the result of a suspension of the motor function of that part of the brain controlling that set of muscles; or conversely, if these sources of stimuli are undeveloped or have become diseased, it is possible that they may become accelerated in functioning thru a development of the muscle or muscles which they control. This fact has been quite largely developed under the direction of Professor Scripture, of Yale University; many of his experiments have been based upon data furnished by me while at Elmira.

The influence of manual training upon the life of any pupil depends upon two things: first, the nature of the tool-activities; and, secondly, the relation of these tool-activities to the life of the pupil thru the things furnished as a project. These are further modified by the personality of the teacher and his special fitness for the work.

At Elmira the selection of tool projects and the processes for the performance of these ends were designed to meet and overcome the special defect in particular groups by using materials of paper, wood, metal, and clay. From these materials and carefully designed models we could illustrate a principle in mathematics or enforce a moral law; thus, a force may be set in motion which shall act upon the mind, the brain, and the body to produce healthy beneficial thought and action. If this manual work is intelligently maintained, new interests are awakened, well-ordered habits lead to active discrimination, and earnest concentration and decisions are formed which lead to increased mental and moral enlargement.

By careful selection of these non-responsive prisoners, based on closely tabulated daily observations, we discovered that these inmates could be properly grouped under one of three general classifications of recognized defectives. Our duty now lay in adapting manual training to overcome these defects and to restore the individual to a more normal condition, wherein he would become susceptible to reformatory influences affecting his release, and thereby fit himself for his return to society as a contributive citizen rather than a parasitic individual.

To speak analytically on these classifications, I must name the groups and show causes for classification :

Group 1, mathematical defectives.—These pupils fail specially in arithmetic, likewise in trades classes where the demand for mathematical acuteness and manual expression therefrom make it difficult for these defectives to comprehend or intelligently pursue the outlines. This defect, if allowed to continue or await its eradication under the usual school instruction and trades teaching, would mean much incumbrance to the class organization, and thus deprive those fitted to advance of that share of active intellectual work which they need to qualify for parole release.

As soon as this arithmetical defect is recognized, the pupils are assigned to the manual-training school, and retained there for treatment until such time as we feel they are capable of pursuing the routine work of the school of letters and the mathematics involved in the projects of the technological class to which they are assigned for trades teaching.

The manual subjects selected for this class of defectives are as follows : first term—35 hours a week for 17 weeks : mechanical drawing, sloyd, wood-work, athletics and calisthenics, clay-modeling, and mental arithmetic ; second term—same as above, except cardboard constructions substituted for clay-modeling ; third term—same as above, except wood-turning substituted for cardboard constructions.

The time at my disposal does not permit giving a detailed description of methods and showing the relation of the several tool processes to the development of mathematical acquisitiveness, or of showing quantitatively the moral improvement among those pupils whom I shall later designate as "control defectives," or even the third group, designated as "mentally deficient." You must accept the statements of results as I know them, and as they are attested by such eminent authorities as Professor Scripture, of Yale University ; Professor Richards, of Teachers College, Columbia University ; Dr. Henderson, of the department of sociology, University of Chicago ; the late Charles Dudley Warner ; Edward Atkinson ; Hon. Frederick Wines, of the Census Department, Washington, D. C. ; and others who might be named.

It is difficult to express degrees of human intelligence or moral predication in terms of percentages ; yet it is the accepted method for comparison, and I follow it for want of a better. So I give briefly these statistics :

total number assigned during one year for treatment as mathematical defectives, 120; those improved, 46 per cent.; those unimproved, 53 per cent.; average time of attendance, 9 months, 3 days.

Group 2, control defectives.—These are persons who in the reformatory community are anti-social. Their indifference to the rules governing free society, with added antipathy to all forms of regulation which mean the subordination of depraved tastes and vicious habits to well-ordered habits, follows in the social organization of the reformatory; this depravity is yet a part of their organism as they enter into this new life of enforced observance of those necessary qualifications for citizenship; so they do not easily adjust themselves to the regulations of the new environment which requires that their habits shall be such as will develop self-respect, recognize authority, and become self-sustaining thru well-directed industry, thereby forming a part of a well-adjusted fraternity. That these spores of humanity do not conform to regulations approximating those in free society is evidence to us of a defect in character. This is a defect in self-control, and it exhibits itself in many ways. These improper physical and mental manifestations indicate certain other mental and moral lesions; these must be met and overcome before the subject is amenable to his environment, which so nearly approaches that of organized society.

As soon as this control defect is recognized, the pupils are assigned for treatment in the manual-training school for the purpose of supplying a more intensive atmosphere. Our object is to secure a conscious self-activity in right directions by doing the things which make for self-respect; to secure thru manual performances a more earnest expression of permanent change of habits; to habituate them to do definite, honorable acts thru honest tool performances, and thru good designs, paintings, etc., to suggest enjoyment for the beautiful in life; in short, to lead them to higher motives and more noble purposes.

We follow out this idea of manual occupation by securing projects which subordinate the physical nature, projects which tend to lift the mind above the ignominy of its confinement and thru regularity of tool performances secure a habitual orderly employment of all the many forces which these active but badly adjusted individuals have at their command.

The tool processes selected for these control defectives are as follows: first term—35 hours a week for 17 weeks: athletics and calisthenics, geometric constructions, wood-turning, pattern-making, mechanical and free-hand drawing, wood-carving; second term—same as above, except substitution of molding for wood-turning; third term—same as second term, except chipping and filing for molding.

Statistical data of results in the case of control defectives: total number assigned and under treatment, 257; those improved, 30 per cent.; unimproved, 70 per cent.

Group 3, general defectives.—This class of pupils are among the lowest order, intellectually and physically, in prison society; men in whom hereditary influences for generations show a legacy of diseased bodies, disordered minds, enervated brains; and these organs have been further weakened by unnatural sexual practices. These pupils are between the densely ignorant and the imbecile; many of them should not have been sent to the reformatory, but to some permanent home for imbeciles.

For many of them we can, thru manual processes, physical training, baths, dietary, and special elementary-school work correlated to manual training, develop sufficient mental expression to cause them to respond to the general demands of school and demeanor regulations, and thus fit them for some kind of honest labor after release.

The manual processes for these defectives are as follows: athletics and calisthenics, free-hand drawing, elementary wood-work, mental arithmetic, and sentence-building.

Total number assigned for treatment, 61; those improved, 30 per cent.; those unimproved, 70 per cent.; average time in attendance, 11 months, 18 days.

From the foregoing remarks we have seen that manual training is not only of value as an educational factor leading to self-activity and mental development, but it becomes, in the hands of the scientist—one conversant with pedagogy, physiology, psychology, and applied mechanics—a potent factor for moral ends. It opens up avenues for activities which are in direct consonance with the laws governing moral expression. All morality is but a harmonious adjustment of one's higher nature with known elements in human character, which elements are the vital forces in society that lift it above license, above conspiracy, above abuse. It is that force in human affairs which removes the disposition to riotousness, to self-abasement, and puts one in an atmosphere of conscious relation to divine law. It is clear to my mind that the presence of manual training in our public-school system will have a far-reaching influence upon human activities, because it gives that delightful balance in mental growth which indicates the wisely educated person. For defectives in public institutions it is possible thru manual training to awaken dormant consciousness of creative force; and, further, it brings into use the neglected motor areas of the brain thru the enforced functioning of their corresponding muscular agents.

I cannot close this paper on the "Possibilities of Manual Training for Moral Ends" without reference to the pertinent remark of Ruskin, made long before the science of teaching was as well understood as at the present: "A boy cannot learn to take a straight shaving or drive a fine curve without learning a multitude of other matters which the life of man could not teach him."

ROUND TABLES

ROUND TABLE OF SUPERINTENDENTS OF LARGE CITIES

LEADER—SUPERINTENDENT F. LOUIS SOLDAN, ST. LOUIS, MO.

General topic: Organization of the Work of Inspection and Supervision thru Assistant Teachers and Principals, so as to Reach the Grade Teacher.

In opening the discussion of the topics submitted by the president of the department, Mr. Soldan called attention to some of the inherent difficulties growing out of the fact that the number of teachers is usually so great as to render personal acquaintance with their work by the superintendent impossible, and to the necessity of depending in a large measure upon the visits of inspection made by assistants and principals.

SUPERINTENDENT L. H. JONES, Cleveland, O.—The superintendent himself should make a series of visits to the same teacher on the same day—three or four visits of short duration, say five minutes. On the next day he should visit the same teacher again to observe how the lessons succeeding the ones which he had observed are given, to determine if the teacher had benefited by the suggestions offered by him on the preceding day. The superintendent cannot visit all teachers in this way, but he can visit the best teachers and the poorest teachers; then thru meetings with the supervising officers he can establish the general policy which shall govern the work. Meetings with principals should be of the same nature.

SUPERINTENDENT W. F. SLATON, Atlanta, Ga., with one assistant supervises the work of 258 teachers. He visits each one once in each year. He emphasizes the need of protecting the individuality of the teacher. He holds grade meetings, followed by general meetings of all the teachers.

SUPERINTENDENT SOLDAN, the chairman, pointed out the need of encouragement, showing that even criticism can be made in such a way as to stimulate the teacher to renewed effort. He spoke of the importance of personal talks with the teacher to correct faulty methods of questioning and kindred errors. He raised the question whether supervision is for the purpose of stimulating or for lopping off, or for the combination of both.

SUPERINTENDENT JONES said that conference for the purpose of stimulating to better work was the only kind that should be conducted in the schoolroom. Interviews for any other purpose should be conducted in the superintendent's office.

SUPERINTENDENT H. O. R. SIEFERT, Milwaukee, Wis., emphasized the importance of acquaintance with the teacher. Principals are the superintendent's cabinet. Teachers are to be influenced thru the principal. The superintendent really knows a class only by taking it himself. He should, whenever possible, commend the work of the teacher as shown by the work of the class. He corrects his own record of a teacher's efficiency by comparing it with the record of his assistant and of the principal. Men, as a rule, are more helpful as principals than women. In grade meetings the teachers form their own organization.

DISTRICT SUPERINTENDENT LESLIE LEWIS, Chicago.—It is the duty of superintendent and principal to aid the teacher to succeed. Quite generally, if the teacher fails, it is our fault. To help the teacher there must be acquaintance. Such acquaintance cannot be made in five- or ten-minute visits. Criticisms may sometimes be made in the presence of the principal. Criticisms may be kindly given, and when so given are as a rule gratefully received. Men and women are equally valuable as principals. Teachers must be informed kindly but firmly of the exact ground of the criticism.

MR. SOLDAN quoted one of Lincoln's sayings, "One drop of honey catches more flies than a gallon of vinegar," and another from the Talmud, "There is a soul of goodness in things evil." He then raised the question of how to avoid collision of authority in making suggestions to teachers.

MR. LEWIS answered that he makes such suggestions in the presence of the principals.

MR. SIEFERT advised telling the teacher, "Do as the principal told you," and then working with the principal to make the correction.

MR. JONES recommended such an understanding with supervising officers that such difficulties will rarely occur.

SUPERINTENDENT W. N. HAILMANN, Dayton, O.—The superintendent must deal directly with the principal, conferring with him before making criticisms of teachers. Let the principal deal with the matter without help, unless he wishes it. Kindness and benevolence should be exercised, but, in some instances, a time comes when a teacher must be asked to resign. The principal must be made to feel his responsibility as well as his power. Organizations help. The superintendent should seek the advice of his principals, should encourage free discussion, should give credit for assistance. He should not require things done in this way or that way, but should aim only at the accomplishment of certain results. Thru teachers' meetings teachers realize their own shortcomings. Teachers may sometimes be transferred to a more appreciative principal. Both principals and teachers should be led to understand that they, not the superintendent, make the school.

Teachers in Dayton are divided into chapters for the study of certain lines of work, as literature, history, geography, etc. Those deficient in any direction are advised to join the chapter devoted to the study of that subject. The superintendent calls attention to sources of information. He places the stress of supervision upon the attitude of the teacher toward the children.

EX-SUPERINTENDENT ANDERSON, Milwaukee, Wis., holds that the superintendent's services are more effective in speaking to the entire body of teachers about meritorious as well as about faulty methods, since he can select those which are typical. He does not approve of meetings presided over by elected officers. He would appoint the officers.

SUPERINTENDENT HAILMANN has three times a year what he calls a house-cleaning day. The good things observed are summed up, and errors pointed out. Teachers of recognized ability are invariably selected by the teachers to lead the chapters; high-school teachers often being among them.

SUPERINTENDENT SOLDAN explained the character of the teachers' meetings held in St. Louis. At the opening of school each year the 1,700 teachers are invited to come together to hear an address given by the superintendent. Attendance is voluntary, yet more teachers attend than when attendance was required. The opening lecture is a condensation of the experience of the previous year. There are weekly meetings of teachers in various departments, all of which are voluntary. These meetings occur usually at 3:30 in the afternoon, with permission to those who wish to attend to close their schools in time to reach the place of meeting. Principals' meetings occur as often as once in six weeks. The superintendent formulates certain broad principles as a basis for discussion. Teachers are encouraged to criticize the administration. Thanks are always returned to the teachers for such criticisms. Tho anonymous criticisms deserve nothing better than the wastebasket, yet, on the ground that no principal should be kept in ignorance of any statement affecting the work, such communications are sent to the principal to whom they refer, with an explanation of the superintendent's low estimation of their value and with the request that they be returned.

Teachers in St. Louis are appointed from among the graduates of the city normal

school after one year of apprentice teaching. They meet every second Saturday during that apprentice year for the purpose of receiving instruction or for observing a model lesson given by a teacher of some class that has demonstrated the excellence of its work. A pedagogical society was organized in 1869, with membership dues of \$1 a year. Membership at present is 900. Thru this organization professional spirit is enhanced.

SUPERINTENDENT Z. H. BROWN, Nashville, Tenn., never criticises a teacher until the principal has been consulted. The superintendent may sometimes be mistaken. His visits to teachers last from five minutes to thirty minutes. His teachers meet by groups to study certain subjects, each teacher being required to attend one of two possible meetings every two weeks. A large majority of them attend both meetings. These meetings occur at 3:30 in the afternoon, and last forty-five minutes. When a subject occurs in the grades, extending up into the high school; the high-school teacher of that subject is the leader of the class.

SUPERINTENDENT WILLIAM J. M. COX, Moline, Ill.—Criticism, when it must be given, had better be given in the presence of the teacher alone. Mr. Brown never criticises a teacher in the presence of a third person. He expects the principal to request the teacher to correct such faults as he himself may discover, or as the superintendent may point out.

DISTRICT SUPERINTENDENT MISS M. ELIZABETH FARSON, Chicago, considers it just as wrong for the superintendent to be continually talking about poor teachers as it is for the teacher to be continually talking about bad children. Show the teachers how to become better teachers. Superintendents of Chicago, Miss Farson believes, are visiting their schools largely for the sake of learning. Superintendents can learn far more than they teach. Their function is to find commendable things and extend them. On taking charge in her district, in the first four days she visited each principal in her district. Before making suggestions she heard what each had to say. This was also her course with the teachers. What the teachers need is more courage. No superintendent has a right to go into a schoolroom except as an expert. He must be able to do everything that he expects his teachers to do. Everything in the room is a sign of the teacher. Everything in a building is a sign of the principal. All meetings of teachers are voluntary. In closing she said: "Test the atmosphere of the schoolroom, look for the strong things, show the principals and teachers that you are there to help them. Try to create an atmosphere in which the teacher can work out her own salvation with freedom."

SUPERINTENDENT T. M. BALLIET, Springfield, Mass., called attention to the danger confronting the superintendent of losing himself in a mass of petty details. The tendency in college administration and in school supervision is to make so prominent the business side as to consume all the time at command in the mechanism of the work, to leave no time for personal growth, on which all effective leadership depends. The superintendent must secure time for study. Unless he is a student, he will find it absolutely impossible to get his teachers to study.

The things we have to do should be classified. Some of them are so comparatively unimportant that we should put them off until the next day and then forget to do them at all. It is more important with another class of duties to make a decision promptly rather than carefully. Any decision is better than delay. Then there is a third class of duties that must be performed only after the most careful consideration and after consultation with principals and teachers of special ability.

Set apart sacredly one half-day each week for study. Go where no one can find you. Mr. Balliet stated that his own practice had been to devote the month of April mainly to study; in that month visiting schools only occasionally and not with any definite purpose. He emphasized the value of scraps of time for reading. If we let our

interest in study die, we ought to resign. Read thoroly in one or two lines and broadly in other lines. In our meetings it is a mistake to confine our discussions to details. For instance, a talk upon discipline once in ten years should be sufficient. Let results of reading come out in teachers' meetings. We need to reach a certain point before we get the desire to go on. The high-school graduate and the graduate of the normal school have not reached this point. If the superintendent has reached it, he can inspire his teachers to reach it.

MR. JONES said the superintendent has two chief duties: first, to develop ideals and standards; second, to inspire teachers to work.

SUPERINTENDENT E. H. MARK, Louisville, Ky.—Some work must be detail work. You cannot give the teacher adequate help in general meetings. Those are for inspiration. On account of their excellence some rooms need to be visited but seldom. The superintendent is employed as an expert. He is a physician who must diagnose diseases. If the teacher is a noisy teacher, help may be given by taking her without comment to visit a room of the same kind in a distant building. After such a visit one teacher said, after observing the example for a few minutes: "Let me go back to my room; you needn't say a word." Teachers work better if they themselves discover their failings.

It is Mr. Mark's practice to hold conferences with teachers, inviting to such conferences those needing help and those able to give the help needed. He would avoid creating antagonism.

DISTRICT SUPERINTENDENT A. G. LANE, Chicago.—The agencies set in motion by the superintendents should be to aid the teacher to greater efficiency. The principal is the central power in directing the work. The greatest efficiency is secured thru those principals who can step into a schoolroom and illustrate the kind of work that should be done in any grade; therefore he should help the principal to become master of every part of the work. Sympathy between superintendent and teacher, and between teacher and pupils, is essential. The superintendent should hold meetings with principals to inculcate high ideals and to cultivate the proper spirit. The principal has the general direction of the work in his building. The superintendent goes into the rooms to see that these directions are carried out. About one-half of the principals promptly carry out suggestions. Individual work has to be done with the others. One of the most effective means for improving work and establishing high ideals is the grade meeting in which illustrative class exercises are given by skilled teachers and observed by visiting teachers. The week before the opening of school in September is devoted to voluntary meetings of teachers whose professional spirit brings them together to make preparation for the work of the year.

SUPERINTENDENT C. G. PEARSE, Omaha, Neb., emphasized the importance of the business side of supervision. The office of superintendent of schools is of American origin. Each superintendent has developed along individual lines. In time we shall have the man strong on both the business and the educational side. Mr. Pearse commended the idea that the superintendent is to set up standards. He held that it is sometimes necessary to speak of the poor teachers, of the "dead wood" in the profession. We cannot deal wholly with inspiration, tho that is pleasant.

DISTRICT SUPERINTENDENT CHARLES D. LOWRY, Chicago, finds teachers always willing to do hard and tiresome things because they require the least thought. He finds it difficult to get them to give up useless drudgery. He regards it important for the superintendent to show them how to do their work with as little expenditure of energy as possible, as for instance in the minute marking of examination papers. A teacher can easily use all of her time and that of a secretary in doing unprofitable routine work. She should reserve her strength for teaching rather than for recording, for personal rest and for broad study.

ROUND TABLES OF SUPERINTENDENTS OF SMALL CITIES

SECTION A

LEADER—SUPERINTENDENT L. E. WOLFE, KANSAS CITY, KAN.

General topic: The Work of the Superintendent in Small Cities in Developing Greater Efficiency in the Teaching Force.

Sub-topics:

1. What must the superintendent do to insure the advancement of pupils thru the grades along a straight, rather than a broken, line of progress?
2. Necessity for grade teachers knowing the purpose, scope, and plan of work in grades higher and lower than their own.
3. What knowledge of the grade work should high-school teachers have?
4. Means for increasing power of individual teachers in testing, teaching, drilling, and in the proper assignment of the lesson.

SUPERINTENDENT A. K. WHITCOMB, Lowell, Mass.—“What must the superintendent do to insure the advancement of pupils thru the grades along a straight, rather than a broken, line of progress?”

I question whether there should be uniform progress thru the grades. I take the question to mean uniform opportunity. I believe in allowing teachers the largest possible liberty. In Lowell the teachers are made sufficiently uniform in method by being introduced into the corps thru a year's work in the training school. I commend teachers' meetings. I also give examinations for promotion of pupils, having as one object the showing of teachers what work it is expected to accomplish, and the power which pupils are expected to possess in passing from the grade.

SUPERINTENDENT J. H. GLOTFELTER, Atchison, Kan.—Some teachers will not keep their work up to the general level of excellence required. If the superintendent has realized his aims in any degree, he has, thru his teachers' meetings and personal work, developed the varied excellencies of his corps. The new teacher will get the inspiration needed in the teachers' meetings, from contact with other teachers, and from conference with the superintendent. The superintendent may also direct the professional reading in part, and thus give direction to their methods. The teachers' grade meeting, visiting other teachers in their rooms, conversation with other teachers, and personal visitation, with sympathetic criticism, directing of the professional reading, are the means a superintendent may employ in unifying the work of his teachers, so that each may offer inspiring, interesting work.

SUPERINTENDENT W. F. SELLECK, Austin, Minn.—The visiting days are excellent means of acquainting new teachers with the work of the schools.

SUPERINTENDENT JOSEPH CARTER, Champaign, Ill.—In Champaign the teachers of each grade hold teachers' meetings at the room of one of their number while school is in session. The work of the room is discussed, and the supplies are examined. Each teacher is allowed a sum of money to purchase such materials as she wants. The superintendent leaves the teachers together to discuss their work, and feels that their discussion will be freer in his absence. The teachers are also sent to other cities to visit.

SUPERINTENDENT DARIUS STEWARD, Stillwater, Minn.—An institute of one week, conducted by the superintendent, held just before the opening of school, is an excellent means of unifying the work of the various teachers. The superintendent should hold examinations for the purpose of getting acquainted with teachers; he should also do illustrative teaching in their presence.

PRESIDENT I. C. MCNEIL, West Superior Normal School, Wis.—“What must the superintendent do to insure the advancement of pupils thru the grades along a straight, rather than a broken, line of progress, with experienced teachers?” is a question that should claim the attention of superintendents of small cities, and the attention of others

who are interested in the problems of education. As I look at the question, the superintendent must know what a straight line of progress is, and how it may be established. In order that this knowledge may be his, the superintendent should be a man of liberal culture, of active sympathies, of wide experience with the affairs of the world, and of methodical professional training. The fact that a person has graduated from a university is but a small element in the qualifications he should possess in order to have a true knowledge of the duties and responsibilities of a superintendent.

The superintendent needs all the help that may come from courses in normal schools, or from pedagogical courses in universities that are equipped to invite the attention of men and women to the problem of instruction or of school management. It is true that many of the most capable and distinguished superintendents in this country today have learned thru failures — thru harm done to pupils and teachers — what to do and what to avoid. It is quite true that many of the things that are harmful, and that draw attention away from the straight line of progress, may be overcome by a proper study of supervision and its allied problems, in properly conducted professional institutions. It is equally true that there must be something in the aptitude of the individual for the work attempted, for many never can become apt, tactful, forceful superintendents. The superintendent with insight and adjustability must learn, somehow and somewhere, what the straight line of progress is, and how to establish it.

Again, the superintendent should, thru personal contact, by observation of classroom work, and by noting the development of pupils, have an intimate knowledge of the working power, scholarship, educational philosophy, habits, and abilities of his teachers to stimulate the advancement of pupils thru the grades in a straight line. Knowing, as the superintendent should, what ideals are right and what are wrong; knowing what methods are wasteful and what methods are helpful; knowing what philosophy tends to movement along straight lines and what brings little returns; knowing what character is steady and what character is vacillating; and knowing how to adjust means to ends, he will find the problem partly solved by being factored.

When the teacher's qualifications, methods, character, and aims are understood, the superintendent must put himself in such relations with each teacher as will cause her to keep on doing well the things that are now done well, and to change ideals and philosophy in those items of work that are done poorly. In the final summing up it will be found that occasionally a person cannot be led or persuaded to approach a straight line of progress because of deficiency in character, in scholarship, or in educational ideals.

The next step in solving the problem is to determine what is best to be done after the causes of waste, friction, or demoralization are known. Occasional removals of teachers who do not strive to approach a straight line of progress and to make growth will stimulate to better endeavor others who are weak on the character side. Teachers of right character, but weak in scholarship, should be induced to seek sufficient academic training in good professional schools, and they should find their positions open to them again when they have had the training which results in sound scholarship. It is a wonderful help to schools to have teachers leave for a year or two to study. Example is contagious; many superintendents in Wisconsin have found the plan outlined a good one. Scholarship and professional investigation will raise educational ideals as nothing else can. Agitation of educational questions, leading to personal introspection and consequent assimilation, will help to keep the teachers of experience in the grades along the straight line of progress; provided the superintendent, because of natural and acquired powers, is able to guide his own activity, and that of others, to direct and purposeful ends.

SUPERINTENDENT ARTHUR POWELL, Marion, O.—A good course of instruction, correlation of work by teachers, and large common-sense on the part of the superintendent are the essentials.

SUPERINTENDENT R. A. OGG, Kokomo, Ind.—There is danger of placing too much emphasis on the course of study—danger that the teacher will become “professional,” and that the influence of her personality will be lost.

SUPERINTENDENT F. TREUDLEY, Youngstown, O.—There is danger of becoming so entangled in the school machinery that the womanliness of the woman or the manliness of the man will be lost. Men and women of rare culture and great spirit should be brought before the teachers. They should be led to study something besides the course of instruction, in order to liberate themselves from their own whims.

PRESIDENT JOHN R. KIRK, State Normal School, Kirksville, Mo.—Lectures by the superintendent the day or week before school opens in the fall are not likely to be very profitable. They are usually full of abstractions and platitudes which the superintendent has collected during the summer. Most of them are difficult to digest and impossible to assimilate. To the superintendent himself they may be very satisfying. To the teachers at large they are often nauseating in the extreme. The teachers sometimes listen respectfully, because they cannot help themselves. Of course, I may be mistaken, but it does seem to me that the superintendents who have spoken here today do enormously exaggerate the importance of their official dogmatizing before their teachers.

Certainly all teachers should know what is taught in the grades above and below theirs, but the whole tendency of our time is against such knowledge. Each college professor devotes his life to his specialty and usually has little sympathy with anything outside of it. He is engaged in plowing out for himself grooves which sometimes hide him from the eyes of men.

Teaching in one grade for several years has a strong tendency to circumscribe the horizon and destroy the versatility and the adaptability of the mind. We are all more or less creatures of habit. The longer we work in a single department or with a single grade the more completely automatic we become, and the more largely our mental action passes below the plane of consciousness. So great is the tendency to specialize in the high schools and in specific grades that a great many excellent people become useless for any purpose excepting the work of their department or their grade. They therefore become almost as mechanical as the wheels in any other machine. In too many cases the chief business of the superintendent seems to be to make the machine as perfect as possible, regardless of the effect on the wheels.

The summer school is the salvation of many souls that are pedagogically and academically dying. The teacher in the grades should spend at least each alternate summer in such a school, refreshing and expanding the soul by actually studying out and reciting something in advance of former studies. It is sheer folly to suppose that anyone is hurt by summer work. The healthiest people are those who work in summer.

Teachers in the grades usually suffer from an excess of stuff alleged to be pedagogy. They need the emancipation which comes from the habit of delving in fresh new knowledge. They need to be transferred from one grade to another about once every three years or oftener. Otherwise they are likely to become little more than automatons.

SUPERINTENDENT M. A. WHITNEY, Elgin, Ill.—Teachers of grades should know the work of every grade. Specialization is detrimental to harmonious development thruout grades.

SUPERINTENDENT F. V. HUBBARD, Redwing, Minn.—The Redwing schools are leaning toward specialization in the seventh and eighth grades. The teachers should visit other schools to get better views on their special lines.

SUPERINTENDENT JOHN RICHESON, East St. Louis, Ill.—So much emphasis of the course of study tends to a loss of the feeling of personal responsibility on the part of the teachers. They want to shift it upon the superintendent. Specialization is a curse in the grammar schools. The teachers should be specialists only in boy study and girl study. Every teacher should be able intellectually to take any grade.

SUPERINTENDENT A. K. WHITCOMB, Lowell, Mass.—Many schools do not have supervising principals to unify the work of the teachers. How shall teachers be made to appreciate the work of grades above and below their own?

SUPERINTENDENT G. V. BUCHANAN, Sedalia, Mo.—Teachers ought to know, and do know, each year's work. Teachers' meetings in the buildings in which the problems of all the grades are discussed keep teachers posted on the entire work. Revisions of the course of study are made with the assistance of a committee of teachers from all grades. Teachers visit all grades; thus they keep in touch with the entire work.

SUPERINTENDENT McDONALD, Henderson, Ky.—I secure courses of instruction from other superintendents and place them in the hands of my teachers for study. Teachers' meetings at which the methods of teaching single subjects are discussed are excellent for keeping teachers posted on the entire grade work. Teachers will benefit by being required to plan work for all the grades.

PROFESSOR C. M. WOODWARD, St. Louis.—It takes more than a year to complete each year's work. Teachers sin tremendously in keeping children back who ought to go on. The ages of pupils in each grade ought to be published in our reports.

SUPERINTENDENT AARON GOVE, Denver, Colo.—Teachers ought to be very familiar with the work of all the grades. This discussion has dealt too largely with the machine. Temperament, beauty of character, and adaptability should be made the basis of assignment. The teacher with the temperament, character, and spiritual power adapted to small children ought to be teaching them, and her salary for such work should be no less than for a more advanced grade. Let us have less worry over the mechanical side and more attention to the spiritual side—the character side.

SUPERINTENDENT P. R. WALKER, Rockford, Ill.—Teachers should know the grade work fully. High-school teachers who do not understand what is done in the grades misjudge pupils entering their classes. Better results will be secured in every grade when the teacher knows the work of the preceding grades.

SUPERINTENDENT GEORGE GRIFFITH, Utica, N. Y., in discussing sub-topic No. 4 said: I shall assume that my sub-topic covers all that we are wont to include under the expression *good teaching*. I exclude from special consideration the items of discipline, personal influence, loyalty, etc.* The question thus becomes: "How shall we secure better teaching from those under our supervision?" Next to that of selecting good teachers, this is the most important of a superintendent's duties.

I shall presuppose that the superintendent is competent, is absolutely honest in his work and dealings with the teachers, has sympathy with the teachers and with the children in all he does, and has to some extent the power of inspiration.

In order that we may bring, not simply a few, but all, of our teachers to a higher efficiency, three mediate results must be accomplished: (1) The right spirit must be generated among the teachers collectively and individually. We must secure the wish to grow and the willingness to work for that growth. (2) Our teachers must be given the opportunity to know what better work is and how to do it. (3) Those not reached in other ways must be compelled to improve, or resign. The means for accomplishing these three results are as well known to you as they are to me. We differ mainly in the relative importance we attach to some of them. Allow me briefly to classify these means with reference to the above-mentioned three results, and to place my personal emphasis upon some of them.

To bring into our teaching corps the desire to grow and the willingness to work, we need teachers' meetings of various kinds; a professional library and some way to get the teachers to read it; a chance for teachers to see, either in their own schoolrooms or in schools where they may be visiting, some really skillful teaching; and, lastly, the certain knowledge that improvement and superior work will be rewarded by promotion.

Teachers' meetings are of various kinds and for various purposes. The kind to which I refer in this connection is for the entire body of teachers, is not too frequently called, and is addressed by some inspiring educational leader, like Dr. G. Stanley Hall, Dr. E. E. White, Colonel Parker, or President Draper (I speak of those we have had); or, on rare occasions, may be addressed by the superintendent himself when he has some living message to deliver.

Visitation by the teachers to other schools is very important. If I were asked to name the one thing that, more than anything else, brought a new spirit of progress into our Utica schools, I would say that it was the visitation, by different teachers, of schools in other cities. It is one of the very best antidotes to the poison sure to come into any city school system by the policy of training and employing only local teachers. It endangers the complacency almost certain to creep into any system long continued under one management. Leave of absence without loss of pay should be freely granted teachers who will visit schools in other places. In some way the inspiration they thus catch, and what they thus learn, should be communicated, upon their return, to their fellow-teachers.

Most of us and most of our teachers are human, and if there is to be a universal desire and determination to improve, there must be certainty of reward for the superior teacher. We should help our teachers to the better positions in our own city. We should help our best teachers to better positions in other cities. Do you say this course will lose to us our best teachers? True. We lost eleven one year, and I am happy to say I helped nine of them to get these better positions. Our board of education knew I did it. I say to the board and to my teachers that I shall continue to do this. The board says that it is right, and immediately releases a teacher, or raises his salary, whenever he can do better elsewhere. Altho by this policy we lose some of our teachers every year, our belief is now well established that it puts all teachers on their best endeavors, pays in all respects, and is just.

Among the means a superintendent may use for bringing to the knowledge of his teachers what better work is and how to do it, I mention teachers' meetings, study classes, professional reading, summer schools or institutes, illustrative teaching before the teacher, and visitation of other schools. I emphasize study classes and illustrative reading. With few exceptions, we have under our supervision a large number of teachers who have never had an opportunity for systematic scientific study of education, and many of them are anxious to do that kind of work. Now, if we as superintendents can unite such teachers into a class to take hold of the subject and study it week after week thru a year, we can do an incalculable amount of good. All these classes should be elective to the teachers. They join on their own option; but when they have once joined, they are enrolled, the roll is called, attendance is expected so long as they belong to the class, and the preparation of lessons is expected. Such classes I have carried on in psychology, in child study, in methods in two or three common branches, and in the study of valuable educational books. I know my teachers have been helped by them. Let me emphasize that these are not the regular teachers' meetings, that they are not lectures, but that they are regular classes for study.

There is a power and there is a danger in the use of illustrative or model teaching before a teacher as a means of increasing her skill. Nothing makes a direction or suggestion so well understood by the average teacher as to see it put into concrete form then and there. This should also be followed by discussion of what was done. This illustrative teaching may be done by the superintendent or principal in a teacher's room for her individual benefit, or by the superintendent or some teacher before a body of teachers as an illustration of principles or as a basis of discussion. Wherever it is done it has the power always attaching to the concrete. The attendant danger against which we must guard is that it may be done or received simply for imitation. Deliver me from the superintendent who sets a pattern when he should illustrate a principle, and from the teacher who adopts when she should adapt what she may have seen.

What I shall say under my third head belongs, perhaps, more to the general topic of this round table than to my special sub-topic; still I think it has legitimate bearing upon the lesser topic. Those teachers not reached in other ways must be compelled to improve or resign. We should deal with them frankly, in a straightforward manner, and with no shifting about at all. We should have plain talks with them. We should offer criticism, favorable and encouraging, wherever there is any work upon which to base such commendation. We should look for such things as we can justly praise; but when the sum total of a teacher's work is decidedly bad, honesty to ourselves, fairness to her, and justice to the children should preclude us from leaving the impression upon the teacher that she is doing as well as she should. There will be some times with some teachers when we shall be obliged to say with all soberness: "That was poor work;" or, "You are doing poor work. I want you to go home and think about it and then come and see me again;" or, "You are doing no better than when I talked with you before, and I am forced now to the position of saying to you frankly that, unless there is improvement within a certain reasonable time, I shall be obliged to report you to the teachers' committee for dismissal." If this, added to all other possible efforts, does not bring the desired result, the time has come when I, as a superintendent, must realize my responsibility and save the little children who are helpless and almost hopeless in the hands of such teachers. How shall I do it? I will tell you what I believe in doing, and what I have done time and again. I have put a recommendation in writing—in black and white—directed to the teachers' committee, recommending that such and such teachers' resignations be asked for, and if they are not forthcoming, that their places be declared vacant, for reasons which are definitely stated. "Now, gentlemen," I say, "the responsibility is no longer mine." I tell you, fellow-superintendents, that there are not many teachers' committees which will not feel, under such conditions, that your recommendation is based upon the right in the matter. They will take that written recommendation and will act upon it. I can talk to them and suggest, and even urge, such action, but frequently there is no action taken; but when I put that recommendation into black and white, it will accomplish something. Such a course has definitely placed the responsibility, and there are few boards that will not take action.

A word in closing. I want to say that I would never dictate to teachers. I want to give the greatest possible freedom to my teachers. I wish them to study and think. So far as possible I wish them to be original in their methods. I do not want uniformity in my schools. The highest tribute I ever received to my work was when an able superintendent said to me, after a day or two spent in my schools: "I have not found two schools alike."

From this somewhat long, and I fear tiresome, inventory of ways of working to improve teachers in service, we must select and modify according to the conditions under which we work or the ends we would attain. Over and above all ways of working are the clear recognition by the superintendent of high ideals, well-digested plans for attaining the desired ends, and a never-failing determination to "get there."

SECTION B.

LEADER—SUPERINTENDENT WILLIAM J. SHEARER, ELIZABETH, N. J.

General topic: Grading for Efficient Organization in the Interests of Pupils.

SUPERINTENDENT SHEARER, the leader, stated that the need of greater elasticity in grading and promoting was generally conceded. He quoted from data collected by Dr. Harris in confirmation of his position. He also called attention to the frequency of this general topic on the programs of the Department of Superintendence for a number of years back, as showing the deep interest in the question. He said that

no single scheme should be adopted to the exclusion of all other plans, but insisted that, in all schemes, the individuality of the pupils should be given that freedom essential under our American ideals. He stated the three essentials of a good plan of grading and promoting to be : first, accurate classification of pupils ; second, proper provision for reclassification ; third, a proper apportionment of work, with no specific assignment of a given quantity of work to be done in a given time. In closing, he urged that written examinations should not be made the basis of promotions.

SUPERINTENDENT E. M. COLEMAN, Fort Dodge, Ia., in opening the discussion stated that he had been requested to present the plan of grading and classifying that he had been using for the past nine years. In doing this, he wished to be understood as not claiming his plan as the only one, or as a perfect one ; but said that he had found it well adapted to the conditions under which it had been used. He also took occasion to give the credit to Dr. Harris, as it was essentially the plan of short intervals between classes used by the doctor in St. Louis some years ago. He recommended the plan for any school having eight grades below the high school. In the lower four of these grades three classes should be given to each teacher, and in each of the other four grades, only two classes. As the work of the grades is generally considered to consist of eight years' work, of thirty-six weeks each, or 288 weeks in all, these twenty classes would make the class interval about fourteen weeks, if the rate of progress of the slower or average pupils be taken as the standard. But the rate of advancement should be determined by the needs of the best and of the poorest in the class. That is, the work should be given as rapidly as the best of the class can maintain a strong standing in it, and not rapidly enough to prevent the slowest members of the class from getting a fair hold on the work being passed over. In actual practice this rate is found to be about twice as fast as when the effort is to have all, or most, of the class master the work the first time over. From this it appears that the rate of progress over the course reduces the class interval from about fourteen weeks, as given above, to about seven weeks.

In order to protect the pupils who do not master the work the first time over, each class is turned back to the place in the course of study just reached by the next lower class, at intervals varying in practice from six to ten weeks, and the work is again passed over at about the same rate as before. This gives to the pupils who did not at first master the work the chance to take it a second time, while it is still fresh in their memories ; and experience has shown that they profit greatly by this opportunity, as very few pupils under this plan are in a discouraged or indifferent attitude of mind. On the other hand, it is urged that the habit thus engendered of trying to do the best they are capable of doing changes many a so-called dull pupil into a strong pupil.

As each class turns back to the place reached in the course of study by the class next below it, and then takes the work at the pace suited to the needs of the best and of the poorest, as explained above, it is an easy matter to provide for the very strong members of each class at the time of these reviews, by simply advancing them into the class that has reviewed back to meet their class. In other words, these strong pupils merely omit the review, and go on without omission of any of the work. The only difference that has been made with them is that they are now reciting with another set of pupils, where it may not be so easy for them to stand at once at the head of the class. In practice most pupils pass over the work at least twice. A great many of the pupils who were in the lower class of a room remain with the same teacher a whole year, while it is seldom that a pupil changes teachers more than once in a given year, if he starts in the lower class of a room. It is possible for a pupil to change teachers twice in the year, if he is in the higher class of his room at the opening of the year, but the number so doing is not as large as might be imagined, nor has it seemed to be seriously to their disadvantage when it has occurred.

The basis for determining the fitness of pupils to advance is the judgment of the teacher in charge of the work. Written work may be given by her as often as desired,

but it is never to be made the sole basis of promotion. It is not only what a child has done, but also what he can do, that should determine this question; and it is sometimes simply a question as to where he will get the most good, even tho he has not attained to a satisfactory standard of work passed over. Some children should be promoted to the next work simply because they have done all they are able to do with the work already passed over.

In closing, Superintendent Coleman said that he valued the plan more for the interest it develops in a school, and for the influence it exerts toward bringing out the best that is in a child, than he does for any capacity it may have for getting children rapidly over a given amount of work in a given time.

Great interest was manifested in the discussion which followed, and the expression of approval of the principles presented was practically unanimous. A number of superintendents explained how they were reaching a similar result by plans varying more or less from the one outlined by Superintendent Coleman.

SECTION C

LEADER.—SUPERINTENDENT T. A. MOTT, RICHMOND, IND.

General topic: Correlation of High-School and Grammar-Grade Work.

SUPERINTENDENT F. D. BOYNTON, Ithaca, N. Y., emphasized the following points:

1. By such correlation one year of time can be saved for advance work without increasing the burden of either teacher or pupil. This can be done by correlating the work of the seventh, eighth, and ninth grades.

2. A better secondary program can be offered. The question is: Are we giving value received in our high-school work? High schools should be distributed geographically over the city and thereby brought nearer the masses.

3. Pupils will come under the teaching of both men and women. He would advocate the employment of more men as teachers in the higher grades. Boys at this age should have the advantage of being taught by both sexes.

4. The grammar-school program will thereby be truly enriched with the essentials of knowledge—Latin, French, German, English, with history. Enrichment of the grammar-school course has taken the form of additions instead of correlations. The problem before us is: How can we induce our pupils to continue their work into the high school? He would give only a usable knowledge of geography; would stop the study of English grammar early, and give an option in the seventh and eighth years in Latin, French, German, or literature. No subject in the public-school course is so important and so essential as history, and especially civil government. These should be put so low down in the course that the pupil will stay there until he gets them. They should be given him before he reaches the age at which he escapes the truant law. Manual-training and commercial courses should be continued into the high school.

5. The financial problem outside the great cities does not present insurmountable difficulties. In the large cities the present grammar-school buildings may be used.

PROFESSOR A. F. SMITH, Kansas City, Mo., showed that seven years covered time spent in the elementary schools of that city, and eleven years the time spent in both elementary and high school.

PROFESSOR DANIEL E. PHILLIPS, Denver University, had canvassed various systems of schools, and strongly indorsed the position taken by Superintendent Boynton.

PRINCIPAL GEORGE H. ROCKWOOD, Chicago, would look at a subject from the standpoint of the child and would not scatter the high schools. The question is, after all, a financial one. He spoke of a reaction in some schools against algebra and Latin in the

eighth grade. He did not think that Latin in the seventh and eighth grades had accomplished all that had been expected from it.

SUPERINTENDENT T. A. MOTT, Richmond, Ind., described the working of the system in his schools. All seventh and eighth grades in the city are collected in one building, and work is done on a departmental plan. In one and one-half years pupils do a strong high-school year's work in Latin and German. Parents elect whether pupils shall take Latin and German. Subjects such as algebra, etc., are well fitted for eighth-grade children.

SUPERINTENDENT SMITH, Danville, Ill., gave it as his observation and experience that pupils taking algebra in the eighth grade were not better prepared for high-school work.

SUPERINTENDENT J. F. KEATING, Pueblo, Colo., gave as his judgment that the work in algebra was not applicable to grade pupils, and could not be taken in grammar grades without anticipating the work of the high school.

SUPERINTENDENT JUSTIN N. STUDY, Fort Wayne, Ind., gave his experience in two cities. The algebra work of the grades introduces the student to the work of the high school. He would have pupils get technicalities out of the way as early as possible. The testimony of high-school teachers is that algebra work well done in the grades is advantageous to high-school work.

SUPERINTENDENT EDWARD AYRES, La Fayette, Ind., stated that algebra is a subject adapted to eighth-grade pupils. This is evidenced by the intense interest manifested in its study. It encourages pupils to enter the high school.

SUPERINTENDENT J. W. CARR, Anderson, Ind., said that courses of study must not be enriched by adding on. We must take out some of the things already in the course, if we wish to enrich it. Work in reading and language must be strengthened. All work must be done well, and children must have time to grow.

SUPERINTENDENT B. F. MOORE, Marion, Ind., advocated the introduction of departmental work in the higher grammar grades. High-school and grammar-grade methods might be correlated as well as subjects.

SECTION D

LEADER — AUGUSTUS S. DOWNING, TEACHERS' TRAINING SCHOOL,
NEW YORK, N. Y.

General topic: Literature in Grades below the High School.

Sub-topics:

1. What knowledge of literature should pupils have before completing eighth-grade work?
2. When should the teaching of literature be begun in the grades, and how organized so as to make it continuous, systematic, and valuable for knowledge; for power in appreciation, thought, and expression; and for the development of ideals, taste, and love for good literature?
3. What material is needed, and how can it be made available?

MISS MAE E. SCHREIBER, DEPARTMENT OF PUBLIC INSTRUCTION, MADISON, WIS.

The pupil who has studied literature in our public schools should leave the grades with a taste for good literature developed and the habit of reading formed. He should know and practice a method of reading which is right, natural, and practical, and which he can use after he leaves school. He ought to know how to handle a book, how to use an index, how to read to a topic, *i. e.*, to read by skipping, taking only that which he may wish at any particular time. He should have some idea of the entirety of literature because he has read a good part of the best literature. He should have a large body of information gained from literature; not only that which has been used to vivify and

illuminate his other school work, but that which has thrown light on human life and experience. His mind should have been awakened, his imagination quickened, and his interests so aroused that he is in touch with life around him. He should have been broadened by emotional experience, and have received a deeper insight and inspiration and uplift. Above all, he should feel that literature is not a thing apart from his life, but that it has a message and a meaning for him.

Does literature, as generally taught in our schools, do this for the pupil? It does not. And the chief reason for the failure is due to the mistaken idea of what *studying literature* means.

It is a mistake to believe that the study of literature is the study of the *history* of literature. To stuff the mind with biographies of authors and to memorize lists of books they have written is not to know the masters. To learn what others have said of literature will never cultivate the taste and judgment.

The analyzing of a piece of literature till it degenerates into parsing and word-analysis is not experiencing literature. It is taking the very life out of it. For, as Bates says: "The study of literature is neither less nor more than experiencing literature, the taking it to heart and the getting to its heart."

The study of literature must begin with the first day of school, and it must be followed broadly and intelligently during the entire school years. It must be a course which shall, first of all and *always*, recognize literature as a revelation of life, and that the study of literature should be the interpretation of the things of life. It must be a course which recognizes the child as a living human being, with a heart as well as a mind, and a certain limited body of knowledge, experience, and feeling with which to interpret life. This is the most vital consideration in any course, and is oftenest ignored. It must be a course which recognizes the joy of reading, and does everything possible to enhance that joy. It must be a course which recognizes interest as a determining basis for what shall be read, and which aims to develop certain interests which shall persist and shape the child's reading after he leaves school. It must be a course which recognizes the individual—that each child has many interests and many moods, and that all children have not the same tastes and interests.

It cannot be a course in the accepted sense of the term as used in teaching today. There can be no laying out of so many pieces of literature to be read in so much time by each child, no regular examinations of the typical form. Under such conditions the study of literature will become rigid and lifeless—a name only.

WHAT MATERIAL IS NEEDED?

Examine courses in literature, and one cannot help but feel that in most cases they have been made out with no thought of the child. This is especially true in courses where only certain of the great classics are to be read. The great pieces of literature are those which have endured for all time, because they express the deepest insight into the realities of human life; because they express the greatest emotional experience; because they express the supreme triumphs of the imagination; because they are the most beautiful. But that insight is lost upon him who has not had a broad experience with which to comprehend. That emotional stress does not thrill him who has not felt deeply and whose emotional nature has not been cultivated. That divine power of the imagination stirs not him whose imagination has not been trained. And he is blind to that beauty whose sense of the beautiful has not been cultivated. That which a master has conceived only a master can completely comprehend. It took so much of thought, experience, imagination, and feeling to write the classics; it takes just so much thought, experience, imagination, and feeling to fully comprehend them.

And yet we bring these classics to the child with his little world of thought, experience, and feeling, and expect him to understand. The child gets very little out of the book that he does not bring to it—or, rather, it is not what he gets out of the book, but

what the book gets out of him. The child lives in the now. He demands the specific and the concrete. The literature of today is the expression of the life of today. The literature of today is filled with his life, and is quick with his blood; and, because he is of it, it is easiest understood by him, and he must read this life into the literature. I am making no plea for the namby-pamby so-called juvenile literature, or, worst of all, the classics written down to children—I am not shutting out those of the great classics which in their simplicity and directness do appeal to the child-heart; but I do say that a piece of literature shall be placed in any course of literature, not because it is the best, but because it is the *best for the child*.

First on every list should stand books of inspiration—books which uplift the child by presenting higher ideals; books which teach the love of the beautiful and of truth; books which arouse sympathy, which teach the common brotherhood of mankind, and which draw him closer to the Father.

There must be many books, on many subjects, and in many lines of reading, so that each child may find his own. There is no one piece of literature which will touch the lives and meet the needs of all children. He is to learn truth, not by one impression, but by many, each deeper and wider than the one before. Every new relation of the truth helps to correct, clear, and extend the meaning. Instead of trying to get the whole meaning at one time, and in any one piece of literature, read on, getting at truth in its different relations and deepening and enriching experience at the same time.

The varied interests of our complex civilization demand that the man shall have many interests, and that he shall read widely. If our common school is to be a factor in this civilization, it must meet this condition.

The teacher must have in mind that the children's reading must be well balanced. Fiction will always hold the first place, and rightly; but there must be poetry, essays, readings in science, travel, history, and biography. A child will not read profitably unless he is interested, and he can best be guided and led in his reading by means of his interests. The teacher must lead the child from the interests of today to higher and wider interests. Tho each pupil in a grade reads as his interests lead him, still at the end of the year he ought to have completed the circle of subjects.

In all grades the teacher should read much to the children. It gives variety to the work, is often a joy shared, and enables her to bring to them literature they are not able to read for themselves. Memorizing choice selections should constitute a part of every course.

HOW CAN THIS MATERIAL BE MADE AVAILABLE?

The work in literature should be carried on in such a way as to teach the child how to read—how to interpret life. At the same time there must be a quickening and inspiring of the higher forces as we lead him into this world of imagination, of truth, and of beauty.

Each form of literature has its special place in the expression of life, and each must be studied for the essentials. Poetry portrays the emotional side of life. It breathes the joys, hopes, fears, sorrows, strivings, and aspirations of humanity. It gives us the divine fire of genius, teaches us the love of the beautiful, swings us into the world of imagination, and encourages us to do and to be. Fiction portrays life on the social side as no other form of literature does. Social conditions, standards, forces, and conventions are revealed, and the problem of the individual life is worked out with full recognition of countless social influences. Essays and prose composition reveal the thought of mankind.

The work will be essentially the same in character in all the grades, differing only in amount and degree as the children grow and develop. We study life in its social aspect, whether in real life or in books, by studying the things which make up life—the individuals as types, their appearance and dress, food, homes, occupations, amusements, education, and religion. And the work is the same, whether it be a little girl in the second grade reading to find how Agoonack lived in the cold countries, or you and I

reading to get the life of the Eskimo in Nansen's latest book. We judge the character of a person by his appearance, what he says, what he does, what others say of him, how others feel toward him, and how he feels toward others, whether he be in real life or live only in the story-book. Thus the child makes his judgments on little Jarvis as we must on Abraham Lincoln. Actions in real life are judged by the results for good or evil; it is the same in the story-book.

There must be a gradual growth and development in the work thruout the grades in the demand for appreciation, and the power to discriminate and to judge. At first only recognition and appreciation, then comparison and discrimination, and finally certain judgments.

Read first of all for the pleasure; at the same time we wish the child to read thru his book into life. Try to make the great characters in literature real by dwelling on how they look, what they love, what they hate, what they say, what they do. Make them so real that bright, jolly Joe; sweet, suffering Beth; brave, loyal little Jarvis; generous, loving Timothy; and a host of others will come into the schoolroom and sit with the children and teach them and preach to them as the teacher never could. Bring to them children who will comfort them because of bitter experience shared—children whose weakness and suffering will make them sorry and leave them with hearts longing to help. Make real to the pupils men, women, and children whose experience they will share, whose nobility and sweetness will go into their lives, and who will fill them with a desire to be and a courage to do. Make human to them the dwellers in distant lands and times by studying the things which go to make up their lives. Ask for judgments on certain acts, and, as the children grow older and gain in reasoning power, consequences of certain acts may be traced, motives discovered, and generalizations made.

A poem is a work of art to be admired, enjoyed, and felt. Music, beauty, imagination, passion, insight, inspiration, and faith are the essential characteristics of poetry. With children we cannot do much more than to get them to feel these. Our work must be to get them to give themselves up to these influences. Then often all we have to do is to get out from between the child and the master and let the child feel the divine fire of genius. Ask for passages, or poems, that the children love best, and almost always they will select those expressing passion, inspiration, insight, truth, and faith. Because they select these, be sure they appreciate in some degree.

One of the greatest charms of poetry is the rhythm or music. Read it to them. Let them feel the music, and after a time they will find it varied—sometimes smooth and flowing, and again rough and broken; sometimes light and quick, and again heavy and slow-moving. Reading a number of poems by a single poet, they will find there is a sameness about his way of singing; that Tennyson's music is varied, polished, and exquisite; that Bryant's music is deep, full, and resounding; that Riley's is dainty and light.

That the children shall see beauty in the world around them, bring to them the beautiful pictures of nature which the poet has painted, so that they may learn to see with his eyes and love with his love—for who is so sure of the beauty of the world as the poet? We can learn beauty only by seeing beauty. Not one beautiful picture, but many pictures. As the children look at picture after picture, comparing them with each other, and finding their counterparts in nature, they are learning to know the beautiful, and, because they know, to love the beautiful. Finally, after much reading and a grouping of the paintings about the poet, they will know him as a painter and share with him his love for the beautiful. They will learn that Tennyson sees only the beautiful in nature, and paints exquisite landscapes filled with detail; that Scott's pictures are highly colored; that Byron paints nature in her grandeur.

In reading for thought it must be remembered that there are not only the mental processes necessary to the understanding of the facts, but there are further mental processes of relating and organizing. The aim should be to cultivate the power to grasp a

piece of literature as a unit. That unit should be small with the young children, and larger and more complex as the child grows in thinking and reasoning powers.

The first step is to get the general idea of the piece of literature—it may be a paragraph, a chapter, or an entire book; then the parts upon which the general idea is based. If descriptive, the things which go to make up the picture; if narrative, the events which form the narration; if argumentative, the points on which the author has based his arguments; etc., etc. In seeing the relation of these parts to each other and to the general idea—discriminating, comparing, judging—the pupil is thinking with the author. The pupil has been using the knowledge he already has to interpret the new knowledge, but he ought consciously to bring up what he already knows on the subject, gained thru experience or previous reading. For instance, he has just read Carlyle's idea of a great man; he compares with Emerson's idea as gained in previous reading; also with Lowell's idea. These ideas, together with his own knowledge of great men, constitute his body of knowledge of great men, which he will use in gaining new knowledge on the subject, which new knowledge will in turn be compared with the old.

Much of this reading will be cursory. Cursory reading does not mean skimming thru a book and throwing it aside with no future thought. It means rapid reading to get the pith and point, which implies skill in the right way of reading and in the use of books.

As the pupil reads under our direction, selecting that which he enjoys, that which uplifts him, that which gives him new ideas of truth and beauty, comparing, judging, his taste is being cultivated.

More and more writings may be grouped about an author till the pupils learn to know him as an individual thru his work: as the poet who looks at and paints nature so and so; as the man who sees men and women and understands human motives this way; as the man who loves that and hates this; as the man they love because he touches their lives and has a sympathy and a message for them.

The recitations should consist of reports on what has been read, and these reports should be mainly oral. It is not necessary that all read and report on the same piece of literature or on different books in the same subject. The recitation ought to be an exchange of impressions and feelings, a talking over of what has been found enjoyable, good, beautiful, and helpful. The pupil makes his report as a contribution to the whole, and stands ready to answer questions by his classmates and teachers; to discuss with them what he has found; and to compare his judgments with theirs.

Thus all take part in the recitation, and attention is secured. Do not ask the pupils to report on everything they read. Many times the best report has been given with never a word spoken. The kindling eye, the tear, the laughter, the tense absorption, have told the teacher more than words ever could.

This work cannot be done except by a living teacher; one who reads life into literature, and literature into life.

Many a teacher is afraid of cursory reading. 'Tis something new in school. The "good old way" is so easy to examine and mark; the lesson can be exact. She feels more sure of herself, for that is the way she was taught. But how about the busy men and women, in their rush for a living? What are they reading? Those children with whom she spent ten weeks on *Snow Bound*? Do they read in the "good old way"? They never imagined even then that it was reading—it was "literature." And when the last poem was analyzed and the last examination passed, they were thru with "literature." And the pity of it is, because it was so thoroly done, they have never opened their book since, and have a distaste for what they imagine is literature.

But all men and women and children, no matter how busy, are interested in life—they are living it; and with literature taught as an interpretation of life, skill gained in getting life out of books quickly and readily, a habit formed of reading, men, women, and children will turn to books for knowledge, recreation, and uplift.

ROUND TABLE OF STATE AND COUNTY SUPERINTENDENTS

LEADER — STATE SUPERINTENDENT L. D. BONEBRAKE, OHIO

General topic: The Consolidation of Schools and the Transportation of Pupils.

STATE SUPERINTENDENT ALFRED BAYLISS of Illinois gave an account of the growth of the graded schools, and the decrease in number and attendance of ungraded schools. There are three hundred schools in Illinois reported as having fewer than ten pupils enrolled, and many of these have fewer than five pupils. He then reported on his visit to the centralized schools of northeastern Ohio. In Gustavus township, Trumbull county, O., nine districts are consolidated. The actual cost for a year is \$265 more than under the old plan. But the increase in attendance is so great that the per capita cost, \$1.29, is less than the per capita cost of the separate schools. The increase in attendance was mostly of the older boys and girls, who usually leave the rural school for want of companionship. Green township had been in doubt in regard to the consolidation plan, so she watched and criticised her neighbor, Gustavus township, for two years, then changed her mind, and eight districts were united and a substantial six-room brick building was erected. There are now in Ohio twenty-three whole townships centralized, and many more partly centralized.

COUNTY SUPERINTENDENT O. J. KERN, Rockford, Ill., was the second speaker. He had accompanied Superintendent Bayliss on his Ohio trip. He gave additional information concerning those schools. Mr. Kern also gave the meeting the following list for further study of the subject: Bulletin 71, entitled "The Consolidation of Rural Schools and Transportation of Pupils," issued by the Department of Agriculture of Pennsylvania—address John Hamilton, Harrisburg, Pa.; report of County Superintendent O. J. Kern, Rockford, Ill., on his visit to the centralized schools of northeastern Ohio; report of Superintendent O. T. Bright of Cook county; report of the Committee of Twelve of the National Educational Association; Bulletin of Information No. 5, sent out by State Superintendent L. D. Harvey of Wisconsin.

MR. GROSS, of De Kalb county, Ill., presented some figures which showed the estimates that farmers were making of the cost of this plan. The cost, in general, is greatly overestimated, for in no case where it has been tried has the cost been materially increased.

STATE SUPERINTENDENT FRANK L. JONES of Indiana gave an account of the results in his state, where centralization has been tried for eleven years. He gave as an illustration Webster township, where two wagons are used for transportation, and a high-school course of three years is maintained. The actual cost is one-third less than that of the separate schools. There are now in Indiana forty-four counties where pupils are transported. There are in that state 115 schools of five pupils or less.

PROFESSOR A. J. HUTTON, of the Whitewater Normal School, said that it is only a question of time until this plan will supersede our present system for rural schools. Educators can help by agitating the question and leading people to consider it. In Wisconsin the state superintendent of public instruction sent seven men thru the state to conduct institutes, and particular effort was made to bring this subject to the favorable attention of the farmers. The schools were visited, and many were found with only five to ten pupils present. Such schools were deadening to the teacher as well as to the pupil.

SUPERINTENDENT A. B. GRAHAM, of Ohio, who has had several years' experience in the practical working of his plan, showed how the sentiment of a board of thirteen men, who opposed the plan, gradually changed until all were united in its support.

STATE SUPERINTENDENT J. W. OLSEN of Minnesota wished to know the effect of this plan upon the character of the men chosen to act as boards of education. The common testimony from the states where the plan has been in operation for some time is that better-qualified officers are chosen.

STATE SUPERINTENDENT BARRETT of Iowa reported that in his state there were forty-seven districts in twenty-five counties where the children were transported at public expense.

STATE SUPERINTENDENT SKINNER of New York said that the rural-school problem is the greatest educational problem of the time. In New York there are 3,500 districts with an attendance of ten or less. In that state one district may contract with another for the education of its children. Last year 250 districts contracted in this way, and had better school facilities in many cases. The uselessness of the school of five or ten pupils was again emphasized.

COUNTY SUPERINTENDENT NATTRASS of Lafayette county, Wis., told of a visit of an institute conductor to his county. He found sixty-four schools, each with less than twenty-one pupils. Superintendent Nattrass thought the people would generally favor the centralization plan if they thoroly understood it, and that the county superintendent should take the lead in presenting it to the people.

COUNTY SUPERINTENDENT FANNY G. GIES of Mower county, Minn., thought that the small village schools could often be used as a nucleus around which several rural districts might centralize. Other states are trying this plan.

COUNTY SUPERINTENDENT BRIGHT of Cook county, Ill., suggested that the county superintendent might give talks illustrated by stereopticon views, showing conditions of various schoolhouses, good and bad, and introducing pictures of the centralized schools.

STATE SUPERINTENDENT W. T. CARRINGTON of Missouri said that in his state the rural districts were centralizing around the village and city schools.

STATE SUPERINTENDENT T. T. TYNAN of Wyoming showed that his state was still too sparsely settled to make centralization a practical plan.

DIVISION SUPERINTENDENT M. S. STONE, of the Philippine Islands, was then introduced by the chairman. He, in a few words, interested his hearers in his work, and made a request for help in obtaining for the Philippines teachers who represent what is purest and best here. The following are the requirements necessary for those desiring to teach there: they must be normal or college graduates; they must now be engaged in educational work; they must be physically sound and able to withstand the tropical climate; they must be willing to take whatever position is given them; they must expect to teach three years in that country.

ROUND TABLE OF TRAINING TEACHERS

LEADER—MISS ISABEL LAWRENCE, ST. CLOUD, MINN.

General topic: Observation of Experts as a Means of Training—Its Value and Limitations.

MISS SARAH C. BROOKS, St. Paul, Minn., opened the discussion by saying that a young, undirected teacher is apt to observe merely the superficial aspects of a lesson—chiefly discipline and success or non-success.

PROFESSOR J. S. GAYLORD, State Normal School, Winona, Minn., argued that under certain circumstances observation may be very helpful, and gave his plan for conducting the same. This led to a discussion of the various plans for conducting observation.

The general opinion seemed to prevail that observation without careful direction by

the training teacher is in the main wasteful of time. Observation by outlines was criticised as being somewhat too mechanical. On the other hand, it was argued that definite directions are necessary, but that these outlines should be varied in character to suit the needs of the student observing.

Mr. Gaylord suggested a plan of sending a student to observe a lesson with the purpose in view of telling or dramatizing in the psychology class what takes place on the part of both child and teacher. This report is to induce careful, concrete observation and a sympathetic attitude on the part of the observer. Objections were made to his plan on the ground that the teacher observed may be displeased with such a method.

MISS HUGHES, London, England, spoke of the necessity of observation of children as well as of teaching. Speaking of her training school in England, she said that the student teacher was required to give a party to her class before beginning to teach it. "Unless she is fit to play with her class, she is not fit to teach it."

The relative amount and time of observation and practice was thought to depend upon conditions. A teacher may observe so poorly that she needs to teach in order to know what to look for in a lesson, and a student may teach so poorly that her class must be taken from her and observation required.

DEAN JAMES E. RUSSELL of Teachers College, Columbia University, said that he had no use for a perfect model school; that student teachers learn to teach in a practice school; and that experienced teachers are incapable of getting good from the observation of perfect teaching.

PROFESSOR DIMON ROBERTS, of the Normal School at Ypsilanti, Mich., suggested that at least half of the teaching in a normal training school should be done by the regular critic.

THE NEED OF INDIVIDUAL INSTRUCTION

SUPERINTENDENT JOHN KENNEDY, BATAVIA, N. Y.

In our little town of ten thousand inhabitants we have been for two years and a half carrying on an experiment in individual instruction which has interested us very much, and which I hope may interest you. The value of the experiment is minimized much by the shortness of the time and the narrowness of the scope. Possibly your wider experience and trained discernment will detect at once weak spots that have hitherto escaped our observation, and destroy the illusion under which we have been laboring. But we shall part with the illusion with some regret, for I assure you that it has been a very pleasant one. The pathway of experiment is not usually thru flowery meadows and vocal groves and by purling crystal streams. It is more likely to be suggestive of burning deserts and flinty heights and polar snows.

We have been experimenting with individual instruction, not as a substitute for class recitation, but as a supplement to it. No one can appreciate more fully than we do the value and benefit of recitations. The fundamental and vital defect of mere tutoring is that it fails to give the many-sided stimulus supplied by a class. The very existence of schools argues that that mode of education has failed. The salient weakness of the district school is its inability to form and maintain classes. But we are beginning to recognize in the district school a very favorable

feature in the opportunity which it affords for getting directly at the individual child and teaching him from the standpoint of his immediate personal needs. The tribute which we are all constantly paying to this feature of the district school is a virtual concession on our part that some teaching needs to be done at close range. Our experiment seems to be driving us to the conclusion that these are not necessarily distinct and contrasted forms of education, that they are not two kinds of education, but that they are two necessary phases of one sound, productive form of education. We have not been led to regard any part of our educational machinery as obsolete. On the contrary, we are more grateful than ever for the entire framework of education made ready to our hands.

We drifted into our experiment. We began it because we could not well help ourselves. We continue it on the ground that when a good thing comes to us it is folly to throw it away. We will drop it when we are convinced that it is wrong; when we find that it is a delusion and a snare. We will drop it when we cease to feel that it is bringing health and happiness to our children, our teachers, and our homes. We will drop it when we cease to feel that it is doubling the most desirable results, and at the same time taking all the killing pinch and strain out of education.

But you doubtless wish to know what it is that I am talking about, and I will hasten to tell you. Prior to two and a half years ago we always divided an overcrowded room. We then had a room that we could not conveniently divide. We were compelled to handle all those children in that one room. It is perhaps needless to say that no compulsion would have induced us to commit the crime of keeping the children together if the room had been a small one. We made our experiment because our rooms were large enough to justify it. But for the spaciousness of the rooms, I doubt whether the experiment would ever have occurred to our minds. If any general or permanent good is to come from the experiment, the credit will be due to the broad-gauge men who planned our central school building nearly thirty years ago.

We put into our overflowing room an extra teacher, and then, with clear consciences, bade it flow on. We wanted neither a Babel nor a silence produced by two conflicting sound-waves, so we directed the second teacher to do only a silent work, and to do it with individuals in accordance with their needs. Her instructions were quite as laconic as those which sent Dewey to Manila Bay. Her instructions were to find the weak spots in the room and make them the strong spots, and to do this in such a way as not to disturb the established work of the room. We were vaguely conscious of doing a good thing. But it was largely an arrow shot at a venture; it was a mode of escape from a *cul-de-sac*.

We passed thru much perplexity before we saw how to use two teachers in one room. Plan after plan was brought forward and successively demolished by the strong practical judgment of the board of education.

When the present plan was suggested it was unanimously hailed with delight and voted in at once, accompanied by this epigrammatic remark from the president of the board: "That is not only a revelation, but a revolution." He saw at a flash a form of educational work that is absolutely free from every fierce criticism that has been discharged at the graded-school system. No charge of overpressure and overstrain could be made against such a system, and no charge could be made against it of riding children down. No charge of cruelty to the slower minds could be made against a system that had made such ample provision for rescuing them from their difficulties, their perplexities, their sorrows, their despair. No charge of keeping bright children marking time and losing their interest in education could be made against a system that provides systematically for getting all the drags moved forward on to the most advanced line. No charge of overstraining teachers could be made against a system that brought special relief to the very points where the killing strain came in. No charge of destroying the health of teachers and children could be brought against a system that provided systematically for the elimination of worry and despair. A system that could send the children home to sleep and let their parents sleep was not to be attacked on sanitary grounds. And I am informed by some of our medical men that our revolution came just in time to ward off such an attack. We got out of a practical difficulty by thinking our way out. We felt that we were right, and anticipated great things. But what we anticipated was but a small part of what we have realized.

I do not know how it may strike the general educational world, but with us it is a revolution. I doubt whether we shall ever again divide an overflowing room. We have not done so up to the present time, at least, tho no less than five rooms have in the interim required relief. We thought we learned many things from putting that individual-instruction teacher into that first room, and they all seem good things—blessed things. When the Roman Campagna is made as salubrious as the shore of Lake Lucerne, the transformation will not be greater nor more astonishing than seemed to us the change in the whole atmosphere of that room. Sweetness and light will scarcely express the influence disseminated by that teacher who came in there to minister to the exact needs of those identical little children. And, before she knew it, the other teacher was transformed into a ministering angel also. There came over her features an unwonted serenity; her voice took on an unaccustomed note of sweetness; we actually found her beaming on the children that she had been hitherto nagging and scolding. The room flowed on, and the very woman that had been on the verge of hysterics with forty-nine was throwing the broad mantle of a mother's love over seventy-eight. And they were all precious in her sight. Nor was her case singular. It was quite typical of the tendencies of the old work and the blessedness of the new.

We have had no occasion to be stern or exacting, or to make fierce demands on the children and their parents, since we could not divide that room and start another storm-center.

The irate parent is now almost a thing unknown. Indeed, the benediction of the parents was one of our earliest, and continues to be one of our sweetest, rewards. They say that the change in our work has brought sunshine into their homes; and in saying this I report to you their language, not mine. No more wretched children bringing home their arrears of school work to worry them into illness and to disseminate wretchedness and illness thruout the household. No more sharp collisions on the question of discipline where the overwrought teacher has gone just a little too far, and where the overwrought parent was keenly sensitive to what seemed at least unkindness, if not manifest injustice. All is now serene. Every teacher's presence is now a benediction; and no couch at home is any longer the reclining place of restless or feverish sorrow.

But we got at once something else from our experiment besides happiness. And it is wonderful what capacity for happiness children do reveal. But when they are warmed up, it is wonderful what a capacity they show for other things besides happiness. We found that happy children have a capacity for thinking and learning. "Out of the mouth of babes and sucklings cometh instruction;" that room of little people, when apparently properly organized and conducted, taught us to put on sackcloth and ashes for some of our past misdeeds. We have all heard of the father who directed the boarding-school authorities to buy his daughter a capacity when informed that she lacked it. But we think we have found a better way than that. Just put her into the incubator of a room supplied with individual instruction, and ere long you are likely to find that you have on your hands a Sappho, a Cornelia, or a Vittoria Colonna, instead of a Nicholas Nickleby's child-wife. We think that we have learned that a slow mind is likely to be merely a chilled mind. It just needs warming up a little. If we read our experiment aright, you don't need any special promotions nor short grade intervals to keep the brighter pupils from marking time. Just warm up the slow ones, and they will put the quick ones onto the "double-quick."

We have seen this done in scores of instances. And it is so satisfactory to be able to keep your little troops and companies and regiments together. We are not ready yet to assert that absolute uniformity of progress and attainment may be secured in the children of a grade. But we are ready to say that such an approach to it may be secured as to render reclassification almost unnecessary. We are prepared to say that very many apparently hopelessly dull pupils may be intellectualized, and that a school may find its master-minds coming up out of that class. And where master-mind comes up out of that class, it is almost sure to come

with a pre-endowment of master-character. We have seen the most astonishing awakenings where there had been the most hopeless dragging. We are now moving our grades forward in something like solid phalanx, and we think that marking time has almost ceased. Our former grade lines were very much askew, and we used to keep snipping off the leaders and slipping them into the grade beyond. We still find individuals who need to be replaced, but they are becoming rare exceptions. The lines have become tolerably well rectified; there are no longer the extremes of irksome waiting or crushed despair.

Our experiment in the two-teacher rooms has left us nothing to be desired. The arrangement seems ideal, and the effects and results seem to us marvelous. We have yet many rooms in which there is but a single teacher, because there are in those rooms pupils enough for only one teacher. We are not so rich nor so foolish as to put two persons to doing the work of one. Each of our rooms will doubtless have a second teacher when the number of pupils will make a second teacher necessary. Meanwhile we varied our experiment so as to introduce individual instruction into our one-teacher rooms and into the classes of our high school. This we have done by stopping half the recitations and devoting half the recitation periods to individual instruction. And the results compare very favorably with those obtained in the two-teacher rooms.

It will be maintained, no doubt, that the power is in the teacher rather than in the method. And in a measure this is true. It was David who struck down Goliath, and not the sling. It was the Theban formation, however, that struck down the hegemony of Sparta. Epaminondas won by creating and perfecting his instrument. It was the Macedonian development of the Theban phalanx that changed the history of the world.

The work of the needle-gun and the ironclad battleship is fresh in our mind. The whole military world is watching with feverish interest for the appearance of the next empire-maker. The whole commercial world stands ready to abandon all its machinery. Competition must have the latest instruments. And so will the mere necessities of competition compel new moves in education.

Aside from the great matters of life, health, character, and happiness that are involved, I do not think that pure class-teaching or mass-teaching can reach educational results at all comparable with those reached by the due combination of class and individual instruction; and this I say after experience with both forms of school work. Teachers wear out only where they are doing the inferior form of work. We have not had time yet to see what percentage of a primary class may be carried to the threshold of the high school and to the door of the college under the combined stimulus of class and individual instruction. We have had time, however, to ascertain what percentage have desires and hopes, and even expectations, of reaching the high school, and it is a very large one. We have had time

to see even now a most remarkable congestion taking place in our high school. Our high school has increased 30 per cent. in the past year, whereas one-fifth of that rate would more than cover the increase in the first primary grade. Of course, there is a limit to such disparity of increase; but it would seem to show that we are restoring some normal conditions that had been previously disturbed. It makes us believe now that, if education is to be a pyramid, it will be like that of Cestius by the Ostian gate of Rome, not all on the ground, but shooting its sharp and shapely and nearly vertical triangles far into the upper air. But even more noticeable than the increase in numbers is the improvement in the work of the students and in the general *esprit de corps*. We have less and less demand for easy courses; and every test shows the advancing standard of scholarship.

This increase and rehabilitation of our upper stories must be in response to some beneficent law; and "How far can it go on?" is the interesting question now before our minds. How do we keep our children? Partly by keeping them well; partly by encouraging them; partly by training them to put forth the shrinking effort of latent powers. We no longer nag them; we no longer mortify them; we no longer pile upon their poor discouraged hearts the intolerable mountain of our impatience. We no longer punish misfortune; we go down to it, take it kindly by the hand, and bring it forward. And we reap the reward of a school system flowing at the top; we reap the reward of wholesome labor free from all violence, pinch, or strain; we reap the reward of a new lease of life; we reap the reward of a conscience void of offense; we reap the reward of comfort, growth, and popularity; we reap the reward of seeing our school the fountain of happiness, vigor, and enterprise.

It might seem at first glance that individual instruction would produce dependence. In fact, it produces the very reverse, and tends constantly to its own elimination. It is only the equity of education, not its law; it is but a special means of relief wherein class-teaching, by reason of its universality, is deficient. It is my opinion that this equity of teaching should be provided for the whole period of youth and adolescence, extending into the second year in college.

It is one thing to promote a movement; it is quite another thing to force it. Force is always ready for violence. Nor can we successfully force our ends against the Creator's laws. We can force catastrophe and mark our pathway with ruin. Davy Crockett's advice would save us all from a great deal of worse than wasted force: "Be sure you are right, and then go ahead."

From an experience of three years with individual instruction as the supplement and corrective of class-teaching, I am compelled to look upon it not only as a great educational departure, but as an imperative humanitarian reform.

DISCUSSION

PRESIDENT J. F. MILLSPAUGH, State Normal School, Winona, Minn.—I am interested in this very attractive movement. My attitude, however, is one of questioning. The reader of the paper has fallen into the danger of presenting extremes; he has given a view of the very best in one system and the very poorest in the other.

The many excellencies in the system presented may come from good supervision and a strong teaching force. They may be due in large part to the spirit of the teachers and to their desire to contribute to the welfare of the children. The presentation just made is strong because it does not seek to destroy the present class system, but to supplement it.

I think the scheme, however, not the wisest that could be devised. It proposes that the amount of individual instruction should be equal in amount to class instruction. There is danger of loss here, danger that the teacher will give instruction when it is not needed. One of the evils of our public-school system is that our pupils are overtaught. There is so much of development of topics, so much of explanation, that pupils are weakened. What is most needed by pupils is habituation to industry—a disposition to overcome difficulty. Children should not fall into the habit of neglecting even difficult duty, nor be deprived of those experiences which put iron into the blood. If instruction is given where it is not needed, it is vicious in its tendency.

Another objection to the system proposed is that special buildings must be constructed for this purpose. Few towns have buildings with rooms fit for this scheme.

I believe also that that is a most fortunate district which finds teachers of such temperament that two can be placed in the same room without incurring some danger of friction. From these and other considerations it would seem that some modification of the plan would be advisable. If, for example, a small number of pupils of the same grade were placed under one teacher, she could alternate class instruction and individual instruction, with the result that each would reinforce and not subvert the other.

The methods and the system set forth in the paper have much in them to admire. It is a misfortune that many of the attempts to remedy evils in the public-school systems have taken the form of attacks. Mr. Kennedy has been wise in refraining from such an attitude.

PRESIDENT G. STANLEY HALL of Clark University.—This is the most important question that has been discussed at this session, and the most important of the questions now before the educational public. I have recently read the manuscript of a new book by Superintendent Search, of Holyoke, Mass., in which he sets forth his views on individual instruction, with which you are somewhat familiar. Years of experience have seasoned the views of Mr. Search, and his present discussion is not without merit. It is utterly impossible to interest anybody in the feasibility of that scheme who is interested in the mechanics of our school system. Our mechanism is well-nigh perfect, and many give much time to still further perfecting it. We have reached a standpoint in our knowledge of the child where we can say that a change in the mechanics of our schools must be made to suit his needs.

The question of individuality is a vastly important thing, and we need to realize more the misfortune of retarding the better half of the child. There is an inspiration in this kind of individual work. And inspiration in teaching, a passion for teaching, is a great thing in the teacher.

There is also a financial argument here. A woman guided by her divine instinct is far more effective and worth more money for being so guided. Individual instruction will tend to bring this out in the teacher.

All that amounts to anything in my work is not in lecturing, not in class effects, but when I sit down in my study and talk with a single young man, and there move upon him. Tho I may not know of the fruit, it is a blessed privilege to feel that the seed so planted will grow.

I wish to express a fundamental conviction. Without losing anything that is good, we are to see a radical transformation in our school work thru more service to the individual child. The lines followed by the party of order are good, but no less glorious is the work of those who are guided by the idea of the importance of the individual. There is one compass that always points toward the pole of human destiny, and that is the developing of the individual child up to its highest maturity. When this new time arrives, we shall have less mechanism, but we shall have more of the thing that inspires the teacher who gets into close contact with the individual child. That is the supreme end to which everything else will be subordinated.

SUPERINTENDENT A. K. WHITCOMB, Lowell, Mass.—I have had an experiment in individual instruction forced upon me. The city of Lowell is a mill town, having about twenty-five thousand operatives employed in its factories. There is annually a great influx of foreigners. The laws of Massachusetts provide for the maintenance of evening schools, and Lowell has conducted such schools for a number of years. The present enrollment in our evening schools is 2,000. Many of the attendants are illiterate; some can read and write a little. Individual instruction has been the invariable rule in these schools for a long time until recently. Each teacher was charged with the instruction of ten or fifteen pupils. He would go from pupil to pupil, giving aid where he could; but if the pupil was very illiterate, he was, of course, unable to do anything or to make use of any suggestions, and, being tired from his day's work, would put his head down on the desk and go to sleep.

When I began to investigate the instruction there I proposed that, if the teachers would teach two pupils at once, they would get around twice as fast. The teachers answered that no sort of classification was possible. However, an attempt at classification was made. Pupils who could work together were put together. The result is that the instruction in the evening schools of Lowell has been entirely changed. No one will be found asleep there now, but interest and enthusiasm predominate. There has been a doubling of efficiency by putting pupils together. This is my experience with individualism.

STATE SUPERINTENDENT DELOS FALL of Michigan.—I believe the time has come to abandon the idea that has grown up around the recitation—the teacher on the platform wise, the pupil down below docile. My thought is this: The recitation hour is but a continuation, under better conditions, of the work hour; the platform is banished, the teacher is on a level with the pupils, so that the work that has just preceded the recitation shall be enlarged upon and impressed. The teacher is not to conduct the recitation in the ordinary way, but is to stimulate the pupils to continue their work under better conditions than the preceding hour.

SUPERINTENDENT THOMAS M. BALLIET, Springfield, Mass.—We have passed from the extreme of the county school and the city graded school to get rid of the bad features of individual instruction. We are now engaged in establishing transportation of pupils in order to improve still further in this direction. The two extremes have been presented by Mr. Whitcomb, against which the reader of the paper has made a protest. The need of individual instruction can be reduced by reaching the individual thru class instruction. What we need today is far more oral instruction than we now have. We have done much to check mere talking in the recitation. Instruction now is not oral teaching; it is talking. True, oral teaching consists in having the matter of the lesson arranged methodically in the mind of the teacher, presented in an artistic way, and the child held responsible. It is no use for us to talk about Herbartian methods unless we can get away from book-teaching and this aimless and endless talking.

The fault of the grammar-school and high-school teacher is that he is not master of his material. Our normal schools are responsible here. They are weak in that they turn out a half-dozen primary teachers who are well prepared to one well-prepared grammar-school teacher.

Teachers do not map out a scheme, but follow the text-book instead. With effective oral instruction there will be fewer pupils who will fall behind the class. Oral instruction will put the teacher in closer touch with the child, and a waking up will result. There is no nation on earth where there is so much dependence on books as in America, and no nation where books are so good and so well prepared. We need books, but pupils must be prepared to use them. The way to prepare to use a book is to train pupils to think in the subject which it presents.

I agree with President Hall that we ought to take care of the bright boys and girls. One disadvantage of the public school is that it does not provide for the bright pupils. The whole machinery should not be given over to the benefit of the dull pupils. I would have two kinds of grammar schools—one of them industrial for those pupils whom such a school will most benefit, and one for bright pupils where the study of modern languages is begun, and where pupils are so fitted for the high school that they will save a year or two of time in the high school.

Grammar-school work should be differentiated and district lines should be abolished. This is not undemocratic. Democracy consists, not in taking care of the poorest ones, but in providing for every class—the best as well as the poorest.

Such a plan as I have outlined will solve a number of questions—among others, the introduction of high-school studies into the grammar school. To introduce into all schools what is fitted for only a few schools is always unsatisfactory.

SUPERINTENDENT KENNEDY closed the discussion. He said, in answer to the question, "What is done with the extra teacher?" "She looks after individual pupils, finds the weak spots and the strong ones, too." In answer to the question, "Would one extra teacher in a six-room building solve the question?" he said: "I should prefer to have the regular teachers care for the work in a small building." Replying to the objection that two teachers in a room may not get on harmoniously, he said: "The teachers we have co-operate and work together in perfect harmony." Continuing, he said: "Individual instruction is not synonymous with help, but it is the kind of help that brings out the faculties of the pupil." It had been said during the discussion that care should be taken in classification to provide for the bright pupils. Superintendent Kennedy replied: "We are liable to be mistaken as to who the bright pupils are."

A STANDARD COURSE OF STUDY FOR ELEMENTARY SCHOOLS IN CITIES

SUPERINTENDENT R. G. BOONE, CINCINNATI, O.

The prevalent unrest concerning courses of study is a hopeful sign. Some things have perhaps been settled; a good many others are yet subjects for controversy. What things shall be taught? In what proportion shall each be employed? What is the best, that is, the most profitable, sequence of topics in each for the uses of the school? What are the really essential subjects, and what are the possible ones which may be used at the option of the teacher or the principal of the school? What are the subjects that have highest educational value, and what are chiefly valuable for training or giving a coveted skill? To what extent should the latter be acquired thru working with the former? Can they be so acquired?

Such are a few of the questions that must occur to everyone interested in arranging or interpreting a course of study. I am asked to submit for the consideration of this body "A Standard Course of Study for Elementary Schools in Cities." Of necessity it must be more or less of a skeleton, an outline, a form to be filled in by the respective schools with some regard to local conditions.

Having in mind what was done by the Committee of Fifteen, and using such familiarity as I have with the school systems of a score of the larger cities, and the contemporary movements of cities of smaller size in a dozen states of the middle and central West, the following theses are submitted as conditioning a "standard course":

THESES

1. Because of (a) the manifoldness of science and the rapid increase in the sum of knowledge, available as instruments for instruction, and (b) the better equipment of teachers, courses of study in the future may safely and wisely be less prescriptive and more suggestive.

This is the first of the three distinctively characteristic points in the recommendations of this paper: that a course of study cannot easily be made, as it might once have been, narrowly prescriptive as inventorying a number of things that must be taught. In the multitude of knowledges, it would seem reasonable to suppose that at any given stage in a class' attainments there will be available a considerable number of approaches to the understanding and skill and interest of its members, which may be selected as the school exercises, and used somewhat indifferently; each serving the teacher's purpose, tho some may be used to better advantage than others.

2. The successive stages in the child's growth, however, and the distribution of work among the several grades in a given system, will probably always require that *the sequence of steps in the course* should be somewhat rigidly prescribed and adhered to.

This cannot, without danger to children, be made a matter of indifference. With what ideas a course in geography, for example, should begin, and how the successive steps should follow each other, how or by what mental process they articulate, and how the child-order or empirical sequence is or should be modified by the logical relations of the ideas, are questions to which the accepted course of study must be taken as the answer. A course of study, therefore, is primarily an attempt to select from the various threads of interest in the child's environment, that will appeal to him thru his growing years, that one in each branch which is likely to be most effective in his maturing.

This is a crucial test of a course of study—the fact and principles of a right succession of lessons and exercises in any given subject. It is easy to compile a list of topics to be followed thru eight years in history,

or thru three years, to prepare the way for a text-book study of geography, or a nature-study group, or an elementary-science course for the grammar grades, or a primary course in literature; but to agree upon a sequence in any or several of these, or in others that will occur to you—a sequence whose following by the school will affect individual power, and an integrated interest, and fix the habit of a logical use of experience—requires scholarship and right training in both the maker of the course and the teacher who is left to execute it.

3. In all important branches, for each step in the course there should be provided co-ordinate topics of like grade, any one or a minimum number of which may be used as the prescription for the class, at the option of the teacher and the principal.

There would thus be arranged for each grade co-ordinate studies in history for a given class, co-ordinate topics in nature work or science, co-ordinate readings in literature, individual options among constructive exercises, etc.

This I submit as the second distinctively characteristic point in the recommendations of the paper.

In geography, for example, there is the double purpose of teaching: (a) the years of study shall leave the child with a reliable and fairly complete knowledge of the earth as the home of man and the occasion of his gradual elevation; and (b) it shall serve to cultivate in him a keen and stimulating geographical sense. This is accomplished, not in any one grade, nor by any exhaustive teacher, but by a group of children or by a single child, in their progress thru the years. Something is accomplished each term, and each successive term or year adds to the notion or picture acquired, or clarifies the fine sense of personal interest. But at any given period, for either purpose, different topics and a different succession of exercises upon them may be chosen and profitably pursued. No two rooms having the same grade need follow the same sequence or use the same lessons, tho they may be working upon the same constituent elements of the subject. Indeed, the same teacher may strengthen her work by changing in successive years both the list of lessons and the sequence of exercises in which the lessons are presented.

As the thesis recites, a minimum number of these co-ordinate topics will constitute the prescription in that subject for that grade. Which topic should be chosen of the possible topics for that grade at that time may be determined by the attainments, the personal and social furnishings of the members of the class; by the abundant or meager equipments of the school; by the qualifications of the teacher; by the local social and recent or current educational biases of the neighborhood, or by the preferences of the principal; or by a composite of all of these influences combined.

What is here said of co-ordinate topics in geography, might, without other change of wording, be applied also to the studies in history for a given class, to nature work or science, to readings in literature, and to constructive exercises. The work in elementary history, civic and social studies, story, myth, biography, and art, furnishes pertinent examples. Here, again, the school has a twofold aim : (a) to make the pupil fairly acquainted with the forces and achievements by which the race has risen in civilization, or by which it has gone into decay; and (b) to arouse and direct the native history sense.

If the particular idea to which the interest of children is to be directed be the civilizing and culturing influence upon the race of tool-using and mechanical invention (and this may be very profitably begun as early as the second or third school year), it can be approached and exemplified by a study of the mechanical tasks of some primitive people, their unaided handwork, the crude products and poor service, and few home and personal comforts, and the low plane of life, as compared with others better situated; or the study may begin with a more developed people, whose life is easier and richer; or it may find material for the same study in the comparison of the commercial products and social conditions of their own time and community as revealing skilled or unskilled labor. There is little preference, *per se*, in any of the three orders. The first may be better suited to certain conditions, the second or third to others. But a course of study would fail of its purpose were it confined to a single prescription, or to follow, for successive years, the same unvarying order.

4. These co-ordinate topics, in sequence thru the elementary course, would form so many possible series, in a given subject, any one of which might be followed according to the preference of teacher or principal, or as might be made necessary by the equipments of the school, or the character of the contributing population.

This will appear most clearly perhaps in the course in literature. The major series may be fixed by the series of books adopted for reading texts; the readers proper; or a series in history; or a series in collateral geography readings; or one in descriptive and appreciative nature stories; or a line of art readings; or a line of standard fiction; or classical and modern biographies chronologically arranged; or masterpieces in literature suited to the several ages. Not all of these certainly can find a place to any large extent, in any one school, for all pupils. But children would learn to read, and to read appreciatively, and have room for a growing literary sense, by following any series named. The last surely should not be neglected; but any one of the remaining series might, without serious mistake, be made the basis of the reading course, and be supplemented by readings from such of the others, or so many of them, as time and the furnishings of the school will permit.

5. Except in certain formal subjects, perhaps, each series should be continuous thruout the elementary-school years. The continuity of all lessons thru the several years of a child's school life is itself a means of education.

Lessons in all human interests, personal, social, and institutional, home life and occupations, the forces and institutions of culture, religion, art, conventionality, and government, should be begun in the earliest years, and be fairly connected for the entire elementary-school period. These exercises may be, for some subjects, daily thruout the course, for others daily for a shorter period, and less frequently thereafter, as the importance may seem to make advisable; but interest in them should be kept up thru the years.

The same observations, in a general way, would be pertinent of geography, nature study and science, mathematics, literature, physical training, music, drawing, etc.

6. While a minimum amount of work in one or more series of each grade should be required of all, additional studies as voluntary work, in others series in the same grade, should, within generous limits, be not only permitted, but encouraged, both to individual pupils and to strong classes.

This thesis is submitted as a third distinctively characteristic recommendation of the paper: that voluntary work, pertinent to the course for the year, but additional to the prescription, be, within generous limits, not only permitted, but encouraged.

One is educated effectively, chiefly, by what he does from his own initiative. Home work that is required by the regulations of the school, and which is measured into the day's school record for a standing, and failing of which one may fail of a passing grade, may be only nauseating. Home work or other out-of-school work, or extra exercises during the school period, done for love of the work and with the purpose of accomplishing a specific result, whose only "must" is one's own interest and intelligent determination, is educative beyond anything—any other *best* thing—the school can do for the child. The wise teacher or principal will learn how to give such voluntary work due recognition and as much credit as may seem deserved.

The course should suggest more books in reading for each step than the class can use, more reference texts in history and geography and travel, more literary masterpieces and kindred writings, more observations of nature and experiments and investigations in science, more constructive exercises, than school conditions make possible.

These voluntary contributions, if intelligently made, should be almost as various as are the children themselves. They will include original, and perhaps very simple, studies among living forms, natural-history collections, constructive uses of natural forces, the manufacture of toys,

machines, and useful articles, the conducting of simple experiments, the reading of books along collateral lines, free-hand or mechanical drawings, painting, carving, modeling, musical composition, original calculations, observations and reports upon particular social or industrial conditions, the growing and care of domestic or wild animals or plants, experimental gardening, the training of animals, and such like. But whatever the form or importance of this supplementary effort that results in some voluntary performance, the product and the personal power should be utilized in the school, to reinforce what the pupil is doing by assignment, and to make clearer the connection between the school and the non-school life.

The course of study must be so flexible, and be so free from mere prescriptions, that due recognition may be made of these voluntary offerings.

7. Such *training* exercises as current conventionality requires (language, social and business forms, contemporary local institutions, codes of right behavior, etc.), or such as the culture of the times demands, should be carefully prescribed and mastered.

8. The course as a whole, and, as far as applicable, every series throughout the several years, should provide exercises for both interpretation and use, for understanding and expression, for perception and construction.

It need not be argued here that no process is complete as an act of experience that does not in some way finally round itself out in use. Whether it be knowing one's letters, or distinguishing the right, or understanding a civil law, or comprehending the calculations of bridge strains, or seeing the meaning of a literary paragraph, or finding the elements of a work of art, or following the reactions of a chemical process, or interpreting the steps in a scientific experiment—the process falls far short of its full promise unless the letters are used freely, the right is lived habitually, the law is intelligently obeyed, similar calculations of bridge strains become necessary and are made, something of the beauties of the literary paragraph and the work of art is worked into one's own life, the chemical process be directed and the scientific experiment controlled with a purpose.

A course of study must therefore provide exercises involving construction and use, not less than understanding and appreciation. The doing may follow the knowing, and always does follow close upon more or less of understanding what is to be done. Aimless doing is no more profitable than do-less knowing. Or the knowing may follow or accompany the doing and be enriched by its reactions.

In history and literature, not less than in mathematics and science, problems may be set, and investigations started, and comparisons inspired, that will call knowledge into use, and afford reason for the exercise of more or less of free skill and resourcefulness.

Manual training will be elsewhere considered, and should be made a part in one form or another of the elementary as well as secondary-school course.

9. At every stage in the course, and daily, exercises should be provided for *sight*, or *impromptu*, or *unprepared* work; and these exercises should be such as, on the one hand, for purposes of training, are easily within the pupil's skill; or, on the other, for purposes of education, challenge his understanding.

To be able to meet the exigencies of life as they arise, often strange and unannounced, one must, at some time, have had practice in using what knowledge one has in stock in meeting exigencies. To work out at the moment an unprepared lesson which the teacher has been careful to see lies fairly within reach of the pupil's experience, reinforced by a reasonable resourcefulness, and to have fixed a habit of so doing by repeated tasks of facing the unfamiliar prepares one for meeting difficulties in subsequent employment and conduct, as the most liberal knowing alone cannot do.

Of course, if the purpose be to cultivate skill in training, many processes using familiar steps in new ways will need to be employed. Hence supplementary texts for sight-reading should be chosen for their easy words and simple form. There should be much singing of familiar music, and easily intelligible scores, and often-recurring melodies, if facility in using musical notation be desired; the frequent employment in drawing of the common elements of form and perspective and grouping in the efforts to express graphically the sense of manifold forms and combinations; practice in putting into the choicest language familiar conventional intercourse; and repeated interpretation of more or less familiar geographic phenomena, where some minor factor is new.

But, for purposes of education, where powers are put to the stretch and the judgment must go prospecting, unprepared tasks must be occasionally set, less obviously of the nature of what is known, to challenge the understanding and put the wits to test. Here effort and resourcefulness count for more than answers and a finished product. But answers and a product should be reached. It is no re-citation, but a new use of old citations, that is wanted. It means the construction, from old material, which is at best little more than raw material, of a new set of experiences organically related after the maker's own patterns. These exercises must be such, indeed, as to challenge all of the pupil's resources. Not how he is able to pass an examination simply, involving the answer to catch questions and the resolving of improbable situations, but how he can interpret real difficulties of limit and right and responsibility and physical law and civic interest and fine-art influences and the personal life, is the test of his progress in learning and manliness.

.This requirement and the voluntary work mentioned in the sixth thesis are of vital importance, and cannot safely be left to the options of indifferent and often immature teachers, but should be provided for in the adopted scheme of instruction. As supplementing the course prescribed, which is to be or may be made the basis of the school's systematic instruction, let there be added, as suited to the attainments of pupils, for each class, a carefully graded and suggestive list of real problems—practical problems, gathered from the science of the day; the economic life; travel and geography; civic and political movements; more or less obvious forces that are modifying contemporary history; current manners and customs; primitive life and habits, involving an explanation and investigation of their origin and decline; literary and art products, and their interactions; industrial movements, and the incident social and domestic conditions; and such like.

These would be rather for the pupil's use than for the teacher's, and constitute the voluntary collateral of the course, the free interest in which, by pupils, will be a most satisfactory mark of good teaching.

10. The ideal to be kept in mind should aim at a distribution of *subject-matter* thru the course, rather than reference to books merely. Indeed, Theses 1, 3, 4, 5, 6, and 9 would make this necessary. The book in most upper grades would come to be a text for a topic, possibly for an entire grade in that subject, but not necessarily, not probably, for different grades or for different rooms or classes of the same grade.

The last requirement, however, should, even in the extremest form, permit the use of books officially adopted as texts upon which to base the class consideration of subjects.

The book would then count for not less, but more; or, rather, books and things and men and human action and achievement and physical forces and phenomena would be co-ordinate as stimuli to the mind and the raw material of experience. The book must always fill a large place in all formal schooling, and should. But much independent doing and observation and the shaping of knowledge to one's own uses, and helps to an original initiative, should be added. And the course of study must not neglect either because the other seems so important. Indeed, a course based upon texts may very properly be greatly shortened. A course fixing the distribution of subject-matter, rather than making assignment of book exercises, would be more extended, less specific, liable to much misinterpretation, and subject to distortion by incompetent teachers and supervisors having strong biases. But even so, it is not the text that is to be taught. The movements of nature, the doings of men, the life of institutions, the art product, the constructive process, the social intercourse, the economic relations—these, not what somebody has said about them, only or chiefly, are the means of mental growth and personal enlargement.

This connection of the day's lessons with the science of the books, not the books of science; with history in the making, *now* or *then*, not an indoctrination into someone's views; with real literature rather than a scrap-book manual or anthology; and with the business and customs of actual life rather than with arbitrary forms that fit to no business—such connection of the day's lesson is both vitalizing as a means of education and usable when books are laid aside. The school should connect with life not less than with the records of life. The school years should be a period of training for participation in this life on the highest plane of personal and public efficiency.

11. As far as the exigencies will permit, all *arts of expression* should be connected with, and grow out of, the (school and non-school) interests of the children in real knowledge and their use of it.

This thesis needs but little comment. Only its relation to the outline course makes its introduction here pertinent. The very term "expression" implies experience to be expressed. The experience must be the child's own. Experience for him means, not what has come to him thru the senses, but what he has brought thru senses; not what he has heard, but what he has assimilated; not the temptations that besiege him, but those he has embraced; not the perceptions, but the apperceptions; not life barnacled onto his, but the life he has domesticated. Of such experience only can he talk or write or draw or sing or carve or paint. And when such impressions have been brought into his life, or assimilated, or embraced, or apperceived, or domesticated, he *will* be able to talk and write and draw and sing and carve and paint. These will then become for the pupil forms of real expression; not certainly fine arts, of necessity, but modes of setting himself forth, for which the school should make abundant provision, and the school course take formal recognition.

12. For children in *our* public schools to fix an acquaintance with, a habitual use of, and adjustment to, the requirements of American civic and social life should be a constant and leading purpose recognized in the course of study.

The traditional course of study for elementary schools in cities makes little of either history or civics, or similar subjects; the rural-school courses even less. Recent movements have been toward the story and biography, the myth and primitive life; and gradually the instruction is becoming more comprehensive of human relations and more systematic. But in many schools, even yet, the efforts include scarcely more than the story, often mechanically told and with doubtful meaning, for the earliest years; moralizing thru biography for the two or three intermediate grades; and a text in history—United States history—introduced into the seventh or eighth grade, sometimes both; with more or fewer lessons, often scrappy and generally technical, upon government and civil relations, and almost no simplest attempt to lead the child to find himself in

the great stream of race and individual effort; or to equip him so that, as a man, he will certainly find himself an intelligent part of these human groups.

The course here suggested assumes that an acquaintance with our American civic and social life, and the habitual use of that knowledge, and the power and disposition to adjust one's self to its requirements, should be a concern of the teacher for every pupil. This instruction should begin in the first school years, and without break, tho not of necessity daily, and much of it is as an incident of the schoolroom life, and the home and street and market experience; continue thru the elementary-school period, the text-book consideration, the historical story, the study of primitive peoples, classical myths, the literatures of different periods, colonial and frontier life and customs, the development of industries, the change in moral standards, the origin and readjustment of local and national institutions, the fine-art reference among different people and under varying conditions, popular rights and responsibilities and their improvement, and the marvelous economic and material progress of the contemporary nations; being woven into one whole of interest and character for the child, who is to take his place as a citizen, who has responsibilities as well as rights, and who may reasonably claim from the schools a fair equipment for his task.

Such studies, too, lay the foundation for the true civic character. It calls for no contention here that this involves more than a knowledge of the forms of government, the provisions of constitutions and charters, and acquaintance with official duties. Civic relations are citizenship relations; the place and functions and privileges and duties of subjects, not less than sovereigns; public and neighborhood support of law and order and decency; and the equal citizenship right of protest and petition that makes for the common welfare as well as the stability of the state. From the child's earliest familiar intercourse with neighbors and strangers, officials, dealers, teachers, physicians, companions, friends and enemies; from his first acquaintance with the post-office and city administration, and public policing and conventional order, and family rights and the place of the church, and the meaning of the school, he has been gathering the experience out of which must be organized the notion of his civic life. This is not something that must be left until he takes up a book upon civics or the constitution or political order, but should be treated as the atmosphere in which the school life of lessons and restriction and command goes on. A right inventory and sequence of these humanistic lessons must make up one important part of the course.

13. As a means of cultivating alertness of mind, and manifoldness of interest, and a familiar use of the causal relation, exercises in interpreting, enjoying, and using nature and natural forces should be prescribed thruout the course.

This does not at first, or of necessity, mean science—organized knowledge of nature; but acquaintance with the physical world of aggregate phenomena, of which some do, and some do not, appeal to the growing child, but the door to which may be opened that shall give every material happening an interest to the observant among children. The teacher should see that if a child have a habit of following up his thread of interest in something, *anything* that appeals to him strongly, so that it be something real, the bent of mind is already fixed for the larger interest that embraces all of nature.

If the school be really interested, the material can be found. Every phase of nature undertaken should be investigated in part, and in as large part as the circumstances of the school will permit, where this phase of nature is native. Study the plant where it grows and as it grows; the animal alive and at freedom, watching its habits and behavior; the soil in the midst of its soil surroundings; minerals in their ores and housed by the sheltering hills; coal in its fixed deposits; snow, ice, and rain, and the conditions of their forming; seeds in their germination and growth; insects as they pass thru their several stages; crystals in their self-shaping; vegetation in the process of decay; streams at their work; the disintegration of rocks and the making of soils; and whatever nature does, at its doing. Free opportunity for field excursions should be provided for and made as much a part of the instructional machinery as are books and lessons and schoolroom exercises. Where it is possible for the small children in cities to have a corner of the yard for a school garden, for the growing of plants and trees, not much may be done with plants and trees, but the result with the little ones will be worth all of the trouble. Make use of the home garden, if there be one, of house plants at home and at school, of public gardens and parks, home and personal pets among animals, zoölogical collections, choice pictures, and specimens of materials—presenting as nearly as may be their natural surroundings and growth and uses.

If the result coveted were mere information about nature, such an arrangement would not be possible, certainly not practicable. But if the purpose be to cultivate alertness of mind, an abiding interest in one's surroundings, and a habitual taking into account of the causal relation among happenings, the uniformity of subject-matter in lessons becomes less important.

Use each season for what it can be made to do for the pupils, and the integration of experiences will take care of itself.

14. Of mathematics for the elementary grades the course should include the simple number and form lessons for the first year or two, used incidentally; the four fundamental processes of arithmetic, with important applications, up to and thru the seventh school year; and the elements of algebra and constructive geometry in the year following.

The reader of the paper is not unmindful of the disciplinary uses of a mathematical course; but it seems altogether probable that these advantages or their equivalent may be secured by an arrangement that gives less than one-third of the school period to the work, and which now too often comprises little else than the most mechanical tagging in the wake of a memorized and ill-understood rule. The mastery of the simpler number and form lessons, and facility and accuracy of calculation under the fundamental forms, come *now* thru the use of number and form and calculation as needed, not thru the solving of possible tho improbable problems, assigned because they are difficult and tax the logical ingenuity.

Magnitude and multitude relations should be constantly *used* with all experiences to which size, form, and number are applicable. The connection should be seen to be a natural one, and the need for their use apparent. The necessity for accuracy; ideas of proportion and magnitude relation; the studies of force, and the changes in matter and form and size; the work of the natural forces in earth and air and sky and among animals and plants; in mechanics and invention and human achievement; in personal and domestic economics, will make sufficient requisition for calculation and the quantifying of experience to give abundant practice. The lessons in logic will then have familiar experience upon which to work.

15. Thruout the course, language as a means of expression, and language as a means of interpretation, must receive constant attention; both uses having recognition from the earliest years, the former predominating in the primary grades, the latter gaining in importance relatively with the advancement of pupils.

Thruout both the earlier and later years of the course, however, far more than the usual attention should be given to training in expression by the voice. All must talk, and should be encouraged to talk, and the school should fix the habit of talking well—not eloquently, nor oratorically, nor of necessity rhetorically, but effectively; with confidence, as one who has a message; intelligently, as one who has reflected upon his speech; skillfully, as one who has been accustomed to talk at his best. The home cannot do this for the child, and the street will not do it. It is one of the great burdens laid upon the school.

Reading aloud for its own sake is perhaps less important than was once thought; but for its influence upon one's speech it is both powerful and discriminating among all the means of training. The silent example of the teacher is great. She should be both an appreciative reader, thoughtful of the effect of her reading, and careful of her daily speech. But the school, as a purposeful instrument of education, should make her personal and professional intercourse among the children a training in right habits in these particulars.

But more important than this power of strong and authoritative expression, much as it means in a free neighborhood democracy, is a keen insight into and appreciation of the meanings and niceties of language as heard and read. To make boys and girls good listeners, and masters of the printed page, to the end that they are made possessors of the wealth of the world's best thought and skill and science, is an achievement to be coveted, by the teacher for the children and by the children as their legitimate claim upon the schools. The course of study must take daily into account this need of children for an appreciative sense of the best literature suited to their attainments and their ideals. The library must be made more and more a factor in accomplishing the school's purposes. That there are libraries is not sufficient. The teacher must see to it that the libraries are rightly used; and they must be where they can be so used, or so administered thru the school's co-operation, that the riches of the shelf are used to good ends. What is learned in the class-room is forgotten; but the books remain, and new ones are published hourly; and the sharp, fine sense of joy over a new thing, or an old one well said, is an abiding power that makes for all sorts of righteousness.

16. In a similar way, drawing, writing, music, manual work, etc., have their primary use as a means of expression, and should be freely drawn upon to reinforce the language exercises—talking and reading—but should look toward fine-art appreciation in their respective domains as a fuller later development.

The pictures which primary children sketch do not mean much as pictures. They are generally crude; they are not certainly works of art. They are not very successful as forms of expression. The label or the context only saves some of them from being meaningless. But as a mark of effort to express the real perception of the child they are eminently successful. They are improved as the thought takes on more definite shape, and as the mind's control of fingers and tools is surer. The habit of expressing one's self so is of more significance than the artistic finish of the product or the skill in the process. A like observation may be made of writing. What system is used is relatively unimportant. Three results may fairly be sought: (a) easy legibility; (b) a clean, attractive page; and (c) so much facility and rapidity as the uses of writing require. It is no more important that children write alike or uniformly than that they draw alike, or speak with the same movement and intonation, or walk with equal stride, or use the same solution of a problem, or note the characteristics of a flower in the same order, or use the same phraseology in their essays. If a boy have the artist's instinct for that sort of work, it will be discovered, and should be recognized; but why must we expect all others to pattern after his greater skill?

Concerning manual exercises it only remains to be said that there are

two or three reasons why, in cities, these in some form or other should be included as a part of the regular prescribed course.

(1) As was mentioned under Thesis 8, no experience is complete until it has been rounded out in some form of concentered product. Manual work is an attempt to realize in material form what the mind has discriminated. No course that omits this can well be made to serve the child fully. In the present day the deficiencies are only the more noticeable.

(2) A second reason for including manual training in the common-school course lies in the fact that it serves to retain many children of both sexes in school, who would and do otherwise leave their studies as soon as the law allows.

(3) A third reason is incident to these two. Constituted as society is, and fitted to labor as is man's estate, every child is in need of a training that shall fasten upon him the manufacturing habit. I trust that my hearers will generously construe this last statement in the light of what has been said elsewhere, as a context. But if there were no other reason than this for the prescription of manual training, as a part of the elementary-school course, for most children under fourteen years of age, the result would justify the means.

But drawing, music, and manual work have in common another, and doubtless a higher, function to perform in schooling. In the words of the bare thesis, they should all look as their fuller or later development toward fine-art appreciation in their respective domains. For most children of any community the schools must be held to do this rather than the home. The best pictures, in reprints at least; the best statuary and casts; the best architectural illustrations; the best specimens of fine printing; beautiful works of mechanic art; examples of fine products of nature — trees, flowers, landscapes; the best musical compositions, and dramatic representations of superior artistic and historical merit; the best available examples of excellence in platform and pulpit speaking, and in public reading, should, as occasion offers and the resources of the school will permit, be kept before children of all social classes, and, in all natural connections with their work, called consciously to their attention, in such way as to furnish standards of superior achievement, cultivate a familiar interest in them, and a habit of enjoying them. While the primary function of these arts may be to strengthen the pupil's expression, and aid him in utilizing his experiences, much may be done, even with the youngest children, in facing them toward excellence in their own efforts. And this is the true fine-art reference, as I take it, for the improving child. The school must see to it that whatever is best and finest in nature or art is given a place in the child's experience. It softens the asperities in a life that, for most of them, is stern enough at best; it transfers the center of interest and concern from self to some "other" that lies in the outside, larger

universe; it raises the plane of living, by raising the plane of enjoyment, and dignifies all human purposes. Thru learning to love the beautiful anywhere there is cultivated a sense for beauty elsewhere. Drawing, music, reading, the bodily carriage, social intercourse, the exercise of authority, and mechanical skill are exalted above the level of mere doing, to doing at one's best. All of which is on the way to fine art.

17. Thruout the years of childhood there should be systematic and carefully graded instruction upon the nature and functions of the body and the bodily organs, the conditions of health, and the physiology of exercise, sleep, eating, etc.; and the purposeful daily practice of simple physical exercises and hygienic rules for sound, vigorous bodies; to the end that a habit may be fixed of intelligently and regularly caring for these things.

Here, as elsewhere, men know enough of what ought to be done, but the years of training in the right way have been too few, or the instruction has been desultory or perfunctory; while the ignorant practice of the wrong way has been all but constant. The right care of one's body is no exception.

That health may be preserved, and the years of productive life lengthened, and the sum of happiness increased, is reason enough for carefully ordering a system of instruction in, and practice of, the best-known principles of private and public hygiene. The course, including daily exercises in one or another form of the subject, should continue thruout the elementary period.

18. As a corollary to what has been said in former paragraphs, it remains to be stated that such a system of purposeful teaching as is outlined would be partial in its results and incomplete in its scope, unless the kindergarten for children from four to six years of age be made an organic part of the system.

That the kindergarten has not been universally commended by school people, and is not now, requires no extended statement. Children so started upon their school career do not readily adjust themselves to a rigid "must" and "must not" order of deportment. Their behavior is often not "good" as measured by the standards of quiet prescribed in many schools. Even for their age they take fewer things upon mere authority than do those who have entered at once upon book lessons. They are more restless under restraint. And if that restraint be arbitrary, they are likely to resent it. But all of these are qualities that show protest against needless forms of behavior and manifold directions from the teacher. The kindergarten, if it be a sensible one, has laid the foundation for a wise self-initiative that the schools often fail to reach, and for an intelligent alertness that the schools have generally repressed. It has given deftness of finger and the manufacturing impulse. Things are worked with, combined, and made up into new forms, often after the little

one's own design, and self-helpfully. It has cultivated resourcefulness and paved the way for a many-sided interest in the subsequent school years. It has fixed the habit of reasonable social intercourse, and the considerateness that marks the behavior of the gentleman or lady. To the kindergarten-trained child the constructive exercises of the grades makes a natural appeal. Simple handwork in the primary years, sloyd, and carving and sewing later, and tool-work in the grammar grades, follow in easy succession. The kindergarten furnishes an excellent preparatory training for these constructive exercises.

Moreover, the argument should not be ignored that without these two kindergarten years the most responsive period of a child's life, educationally, are neglected. Almost no home in this busy day in cities can give the little one just the attention he needs. Certainly not the household of those where both father and mother must spend ten to twelve of the child's waking hours at their own tasks; not in the house of the rich and leisure class, where the little ones are largely left to servants; nor yet in the hovel, whose adult members are often indifferent.

Besides, the kindergarten is organized to generate just those qualities of mind and life for which books and the formal lessons of the school are, theoretically, employed to secure to the child: clean lives; habits of industry and honesty; vigor of mind and body; joyous, hopeful, aggressive boys and girls.

DISCUSSION

PRESIDENT A. S. DRAPER, Champaign, Ill.—We have just heard a very carefully prepared document by Dr. Boone, a past master in pedagogy. The paper teaches the importance of freedom in schools and flexibility in teaching.

I should like to ask if there is anything that should not be undertaken by a school. How much of the course presented in the paper may the child safely undertake? Too much attention is being given to standardizing courses of study. The teacher of the grade below should not have to give too much attention to the work of the grade above. More attention should be given to the teacher and the quality of the teaching. More attention should be given to pupils' temperaments and environments. Too little attention is being given to what a child may easily do in our schools.

Teachers in cities are asked to do more than they can do well. The teacher's work should look to generating enthusiasm. When children become interested in a subject, they will continue investigation without the direction of the teacher. Much of the work done in the schools is discouraging to the child. Many superintendents and teachers attempt to do what they are not prepared to do, and confusion is the result.

There can be no standardizing of courses of study. Teach teachers to teach something and to teach it well. More stress should be laid upon the companionship between pupil and teacher.

If certain tendencies in the public-school work are not corrected, the schools will cease to be common schools. There is nothing more important than that the common schools should remain common.

SUPERINTENDENT M. A. WHITNEY, Elgin, Ill., asked: "Where should the pruning of courses of study begin?"

PRESIDENT DRAPER replied that he would permit the doctors of pedagogy to answer that question.

SUPERINTENDENT F. LOUIS SOLDAN, St. Louis.—I am in hearty sympathy with this paper. A systematic course of study relieves the principals and teachers of much worry and responsibility while performing the duties of their respective positions. Every course of study grows out of the large experience of the teacher. Since pupils pass from one teacher to another, a course of study is necessary in order to prevent confusion. With a general course of study to follow, the teacher is not left in doubt as to what she is to do. A rational course of study, marking out the territory to be covered, is not an infringement upon the liberty and freedom of the teacher. It does not hamper her in her work.

DR. C. A. McMURRY, State Normal School, De Kalb, Ill.—We are inclined to think sometimes that a course of study is a product of the malicious feeling of the schoolmaster. It is no new thing to find that the course of study is overloaded. The filling up and overloading of the course of study is not the work of the schoolmaster. It is the result of our civilization. The course of study is the expression of the life of the people. It represents those things that are common in the life of the people. The difficulty arises from the fact that we are endeavoring to absorb into the course of study so many of the demands of the life of the people. The world is pressing for recognition, and is no longer satisfied with the courses of study of our grandfathers.

The present course is a conglomerate mass—the teacher is not yet ready to grasp with the problem. There is a great necessity for a condensation or simplification of the materials now in use in our courses of study. This ought to receive attention by this association of schoolmasters. Literature can be made an engine of power to introduce many facts of education by this process of correlation.

SUPERINTENDENT W. N. HAILMANN, Dayton, O.—I am in hearty sympathy with Dr. Boone. He has beautifully and systematically presented the essentials of a course of study. We do not believe in the theory of those who are beginning to yield to the signs of the times. We take no stock in that strawman. The course of study is not overloaded. Those who criticise the present course speak of the frill of nature study, the frill of music, art, etc. The so-called frills have transformed the world. These frills help to make life worth living. The function of the frill is to help make the school subjects more vital in the life of the child and in the life of the school. These frills give the child a higher notion of life.

There is no amusement aimed at in the kindergarten. It is real enjoyment that the kindergarten proposes to give the child; a joy that comes by doing—by doing things ourselves and thus making our environments more pleasing.

Dr. Harris has so clearly shown us that the importance of teaching the different subjects of the course of study is not for the sake of the study, but rather to give the child power and skill.

PRESIDENT R. H. HALSEY, State Normal School, Oshkosh, Wis.—The course of study should be more prescriptive and less suggestive. The same principles that should govern in the self-activity of the child should govern in the training of the teacher. Give the teacher more responsibility in the initial training of the child. Co-ordinate topics should be introduced into the different grades for the sake of variety. We must look toward the training of both classes of pupils—the bright and the dull.

It is a dangerous thing to put the bright pupils ahead of the other members of the class. Thoroughness should precede promotion. Give the pupil more work in the grade of which he is a member, rather than remove him by special promotion. Pupils who enter the high school are too often very poorly prepared for the work. They should remain in the same grade with additional work, giving them new territory, rather than have them pass over the same territory again.

SUPERINTENDENT BOONE.— There should be a course — a real sequence of topics — so correlated that it becomes a unit. It may suggest typical studies for each grade, but the same grades in a city need not study the same subject, but the typical subject. The subjects to be studied must be determined by the locality, equipments of the school, etc. Children should have a chance to do something and do it well. The work should be largely voluntary. In the matter of the promotion of a pupil it is not a question of having completed the work of a grade, but the question is : Can he get more work out of the next grade than he can out of the one of which he is a member now ?

SOME ASPECTS OF GRAMMAR-SCHOOL TRAINING

PROFESSOR L. B. R. BRIGGS, HARVARD COLLEGE

Whoever looks into systems of education is almost sure to see something that needs reform, and is inclined to believe that the methods of his own day are all wrong. Thus it has come to pass that every year or every month, according to the degree of progressiveness in the community, new theories of education are sprung on us, and, it may be, tried on our children. Now, as everybody knows, it is ten times as easy to destroy as to reconstruct, and a hundred times as easy to find fault as to suggest practicable and wise and durable improvement. The history of education, like the history of the world, is a history of countless mistakes, with much noble effort and many noble results. There is no reason why education should not admit new light as other sciences admit it — as medicine, for example, admits it ; reform in education has been, and still is, alloyed with religious prejudice, with politics, and with personal power and whim, till in our less hopeful moments the education of boys and girls seems the stamping-ground of experiment and fad. In these experiments for the enlightenment of colleges and schools we sometimes forget the oldest and the best truths of education itself.

From Milton, the parts of his one pamphlet on education are an astounding example of the reformer's lack of practical sense, we may get as good a definition as has ever been devised. "I call a complete and generous education," says Milton, "that which fits a man to perform justly, skillfully, and magnanimously all the offices, both private and public, of peace and war." Accepting this definition, I come with an old story, a story which I have told before, and must tell the worse when I try to put it into new language ; a story, therefore, which here and there I shall let other people tell for me.

At the start I must disclaim any inside knowledge of school systems ; and for this reason it may seem that I ought not to speak of school systems at all. My excuse is twofold — the *a priori* principle in the relation of hard work to solid success, and the unmistakable signs that in modern theories of education this principle is often slighted or ignored. In a

certain sense I speak as an outsider, yet as an outsider who has, and who feels his right to have, a conviction—a conviction that the end of the American public school is to insure the intellectual discipline which is itself a moral force, and which may point for its result to an educated nation.

The first lesson of education is the lesson of getting down to hard work, and doing the work thoroly. It may be learned by a boy or girl who never goes to school, learned in a mill or on a farm; but the highest work in this part of the world must commonly be done by people who for a greater or less number of years have spent the best part of at least five days out of seven for some forty weeks a year in what we call education. The first business of a school is to teach concentration, application, power of tackling intellectual work—qualities which sooner or later a man must have if he is to succeed in life, and which he got in his boyhood if he had the right kind of parents, was the right kind of boy, and went to the right kind of school. (I speak of boys. I bid good-by to the girls here and now, leaving them to be “understood” thruout most of what I have to say.)

Some of us now in middle life recall the days when, as one of my old neighbors puts it, “we were on earth the first time,” and we recall the grammar schools of those days; the bare walls, the single dictionary as the library of each room, and the curriculum, which nobody had dreamt of “enriching”—reading, writing, spelling, arithmetic (quite enough arithmetic), English grammar, and Quackenboss’ *History of the United States*; nothing to attract the eye, no festivity except at recess, no music, no intellectual food outside of the curriculum except an occasional address of five minutes by a more or less illiterate mayor and an occasional question from a rather bashful superintendent (those were early days). For discipline, besides a flogging now and then, the boy who turned his head round to the boy behind him had to stand on the platform with a spring clothespin on his nose till he saw another boy turn his head and transferred the clothespin to him.

Such education had its drawbacks, moral, intellectual, and above all æsthetic; yet some of us may well look back to it as the surest and truest discipline of our lives—for we were taught to work. Sometimes, if you are to turn a college loafer into a man, you send him to a factory, with long and early hours, and immediate responsibility to an officer. You do this because his salvation is work, and because, blind as he now is to the beauty of the intellectual work that he may do, he needs to be educated by manual labor that he must do. You give him work as education. All education is work. This obvious but endangered doctrine is what I am here to preach.

Work [says Bushnell] is activity *for* an end; play activity *as* an end. One prepares the fund or resources of enjoyment; the other is enjoyment itself. When a man goes into

agriculture, trade, or the shop, he consents to undertake a certain expenditure of care and labor, which is only a form of painstaking (rightly named) in order to obtain some ulterior good which is to be his reward; but when a child goes to his play, it is no painstaking, no means to an end; it is itself, rather, both end and joy.

Now, the tendency of education in this country is to turn work into play, just as the tendency of outdoor games in this country is to turn play into work. For early education we have the kindergarten; for football we have relentless training. Have you ever thought of one reason why athletics in American colleges mean so much? It is athletics in which many a youth, pampered at home and at school, gets his only taste of the stern discipline without which he cannot be a man. His studies he evades, and his friends pardon the evasion; his football he cannot evade, or he is branded as a "quitter, as "soft," or "sandless." From his studies he gets more or less culture, but no backbone; from his football he gets the stuff and substance of his education. The business-man often prefers in his office a successful college athlete to a successful college scholar; for the athlete, as the business-man says, "has done something."

The public school should have at least as much educational power as football. Setting aside the question of manual training, a question of great importance to many boys, and speaking of a grammar school, which has for its object intellectual discipline, I believe that the business of the grammar school is to teach a few subjects, essential or of prime importance, and, in teaching them, to give the training which enables people "to do things." The grammar school is for the greatest good of the greatest number. If we are inclined to condemn it for ignoring the individual, we should remember that strength may come to the individual from being ignored, from being treated as one among many who are treated and trained alike. Individual education is the right of a man; to a less degree it is the right of a youth; to some degree it is the right of everybody; but everybody has also that other right of education in common with his equals, with his superiors, and even with his inferiors, education in which he may see the effect of teaching on a variety of minds, each different from his own, and may learn from his fellows as they may learn from him.

Again and again I have seen, in college, students who have become almost hopelessly debilitated from excessive attention to their individual needs—or, rather, to what their parents have believed to be their individual needs; who have never known the stimulus of competition; whose sharp corners have been carefully sharpened more and more, and never rounded off; the bent of whose minds has been followed till their minds have lost all power of attention and concentration—unless something new has come to fascinate them, so that their very attention has seemed a weakness rather than a strength, a yielding of the mind rather

than a conquering by the mind. The business of the grammar school is not to follow the mind, but to lead it; nor is it to entertain or amuse, though a good teacher will entertain and amuse incidentally; nor is it to teach so many things that none can be taught well. It is to drill and drill and drill, to teach accuracy, concentration, self-command, so that he who has been faithful in a few things may be fit, with increasing years and ripening powers, to be ruler over many things. In the grammar school few subjects are essential. Chief among these is the use of the English language. If enough sensible trainers of the voice could be found, I should be tempted to add elocution. Who does not know the strained, high voice of a reciting child or of a chiding schoolmistress? Who that has to use his voice in a large room does not know the weariness of not using it well? A little mathematics, a little geography and history, possibly a little physics, and a great deal of reading, writing, and speaking in the English tongue—these things well taught make a foundation on which any structure of intellectual education may safely rest. Narrow, if you will, but about as wide as a child's foundation can be laid and laid firmly. A few fundamental studies with the habit of mastering the work in hand are an infinitely better basis for the child than a heterogeneous collection of half-learned, cultivating diversions over which he may sprawl, but on which he can never stand. A few studies rightly taught are the first intellectual step toward "that which fits a man to perform justly, skillfully, and magnanimously all the offices, both private and public, of peace and war." Sometimes people complain of drill as benumbing the mind of a child; and the complaint, if the child is young and the drill severe, has foundation. Yet these same persons fail to see how demoralizing to the minds of children an excessive number of studies may be. Children, as everybody knows, love repetition in their amusements, and can stand much more of it in their instruction than their elders can. By multiplying the subjects which we set before them, we run the risk, not merely of dissipating their minds, but of overstimulating them. I do not mean that even a grammar school should ignore the value of variety, and I am glad that music is now taught in our public schools. I mean much what a correspondent of mine meant when he wrote: "I would have a boy use the English language decently, even if he loses the opportunity to study German in the grammar school." What threatens our early education nowadays is the amusement and variety theory. Working upward from the kindergarten it bids fair to weaken the intellect and to sap the will. A well-known teacher in Boston had no difficulty in picking out the members of his school who had begun their education in the kindergarten; and he picked them out because of a weakness in their intellectual processes. There are exceptions and notable ones; and there is, as everybody knows, a lovely side to the kindergarten; but the danger of the kindergarten principle is felt by many a teacher who hardly dares

hint at it. An elective system in college gives a noble liberty to the man who has been so trained that he can use his liberty wisely ; but when an elective system goes lower and lower into our schools till it meets children who have been amused thru the years in which they should have been educated, what chance have these children for the best thing in education?

"On a huge hill
Cragged and steep, Truth stands; and he that will
Reach her about must, and about it go,
And what the hill's suddenness resists, win so."

That I am not fighting shadows or knocking down men of straw, the testimony of a hundred teachers and parents makes clear. The amusement theory, starting in an honest and benignant desire to show children the beauty of the world about them and to rouse their interest in study, especially in the study of nature, may end with the sacrifice of strength in the pupil and of truth in the teacher ; may become a sweetmeat theory, giving the children food which debilitates and deranges the organs that crave it.

Certainly the education of boys should not be a bore and a bugbear, nor should it ignore culture. Yet the culture should not crowd out training ; it should rather be atmospheric ; it should come to the boy from the finer, maturer, and more sensitive character of his teacher ; it should take little or no visible or tangible part in the school program ; it should pervade the whole. In the best teacher, also, is a personal force that inspires some boys with the desire to work and compels others to work, till work becomes a precious, even a priceless, habit of their lives. He is not full of devices and patent appliances for interesting his pupils ; he is not full of theories and fads ; he does his own work, even the drudgery of it, with enthusiasm for it and for his calling. He corrects, chastens, guides, kindles the love of learning ; and constantly he gives to eager eyes some glimpses of that high enjoyment to which learning and discipline may lead ; but he never sacrifices the discipline to any royal road of pleasure.

This is another way of saying that the good teacher does not sacrifice truth "to make things interesting." I have lately read an admirable paper by Miss Soule, of Brookline, Mass., on the foolish untruthfulness of some books designed to interest children in nature. Miss Soule cites a well-known superintendent of public schools who maintains that plants, if they are to interest children, "must be instinct with human attributes ;" and to illustrate his theory about animals as well as plants she has collected from books for children a good many specimens of biological mendacity. Children, she says, are taught that "the kind cow" gives them her milk ; that "a plant does not like to send its young, delicate leaves and flowers into the cold world without wrapping them up, any more than your mother would like to send your baby brother out for the first time without a great deal of such bundling up ;" that the queen bee "is very generous to the young queen,

who of course is her own daughter, and leaves all the furniture and silver spoons and everything of that sort behind." "What," says Miss Soule, "is gained by this?" She tells the effect of it on two children. One who was literal said: "Why, she couldn't leave furniture and silver spoons, because she didn't have any to leave. That is not a very true book, is it?" Another, and brighter, child exclaimed: "How silly that is! It is so stupid to pretend things like that when they could not ever be." "Yet," says Miss Soule, "this child is very imaginative, delights in fairy tales, and lived *Alice in Wonderland* for weeks." Imaginative literature may do what it likes with plants and animals. *Alice in Wonderland*, tho she may not teach children respectful manners, cannot teach them biological untruth. Mr. Kipling's *Rikki Tikki Tavi* is one of the best stories in the English language for old or young; and his *Toomai of the Elephants* has a poetic beauty which it is a distinction for a child to feel. Imaginative literature is one thing, and books for instruction are quite another. Yet one teacher cited to Miss Soule that dismal joke about the queen bee and the silver spoons as "so taking, so cute!" "This method of awakening interest," says Miss Soule, "puts child and animals into false relations, and nothing is gained by it except possibly an added interest on the part of the child. Since this interest is based upon conditions which do not exist, the child has no right to it. The animals are not interesting *in that way*." In the same paper Miss Soule compares "soft pedagogies" with peptonized food.

After reading Miss Soule's paper, one of the best graduates of one of the best kindergarten schools wrote to the author that she (the teacher) "was circulating that paper among all the teachers she knew, because it had shown her that she and the other kindergarten teachers were doing dishonest work for the sake of ease and arousing interest, and that the modern schoolbooks all tended to increase this dishonesty." "It is better," said an American humorist, "not to know so much than to know so many things that ain't so."

An able teacher in Boston, struggling against what she believes to be debilitating methods in the education of today, writes of her own work as "an uphill, out-of-date attempt to keep a simple, healthy school;" and adds that in the attempt she is "constantly losing her grip on the Back Bay." From another teacher of long experience, who writes about modern methods of teaching languages, I quote at some length:

Since the attack on the old system of teaching languages, English as well as Latin and Greek, became effective in an iconoclastic sense, and ineffective in the way of suggesting a better system, the teacher in the secondary schools has been swamped in what I, remembering my friends' experiences with Dr. Sauveur many years ago, have been inclined to call Sauveurism. Sauveurism in teaching, you will remember, spread rapidly, attacked many college centers, and infected violently the opponents of the classical system. It was for a time hailed as the true scientific treatment of all language study, and it really had in it one element of true scientific method, the cumulative gathering of facts

on which to theorize; but the gathering of facts proved in the main to be desultory and the theories nebulous and valueless. This Sauveur rage, while it had its good side in practical training for the spoken language, struck at the root of all sound scientific method in language study. The good in it was as old as the hills, and was already as effectively used in good schools of the classical order as it ever was by Sauveur. The evil in it was its claim that a no-system was better than a system. It threw out what was known and classified. Where true science teaches by rule and tests by experiment, this held that cumulative laboratory work was all-in-all. The Sauveur method was the first wild attempt to replace with a working system the old grammatical training of the schools. It failed and is forgotten. Taking what was good in it—not from Sauveur, but from the old methods, as old as the hills—a few practical teachers, like Daniell and Collar, themselves trained in the old schools, have reintroduced good grammatical work in Latin and Greek instruction. This is elementary training only, but it serves to shorten the period of drudgery and open up early the rich stores of Latin and Greek literature—stores to be best enjoyed without the excess of annotation and cross-reference which some of the literature specialists are attaching to our English classics intended for schools. English grammar also has its method and should, I believe, be taught early and thoroly—the dry details not shunned. In getting these the memory may receive as exact a training as it used to get in the old [Boston] Latin School under Gardner. Once bedded in the mind, the grammatical details should be allowed to repose there, as well forgotten as the flower seed is forgotten when the blossom is sweet in the winds. If they are stirred again, as the young college specialists (not the best of them) are stirring them, I believe the mind will never acquire that fine sense of literary charm that used to be acquired under Channing and Child. I have recalled Sauveur only because he stands in my memory as the *bête noir* of some years of my life spent in teaching English and the classics. But he has passed and is forgotten. Other fads have taken the place of his in language and other studies.

This teacher expresses “doubt as to the robustness of vigor acquired by rolling downhill along the lines of least resistance,” “as if,” he says, “mental vigor were to be got in the malarial tracts and not on the windy and difficult heights.” “Some years ago,” he adds, “when I asked my boy what he would like to do for a living, his answer was: ‘I would like to loaf on salary.’ As he has had no such soft elective open to him, he is now doing very honest work.”

The windy and difficult heights! Can any healthy man or woman compare the pleasure of “loafing on salary” to the pleasure of scaling “the windy and difficult heights”? Indeed, the cry of those who scale these heights is: “Give a boy liberty, and he too will scale them. He will use liberty wisely, because in the wise use of it he will find the keenest enjoyment of the intellectual life.” But a boy, *while he is a boy*, does not see all this. A student from a famous preparatory school, the head master of which is a vigorous and cultivated man, knew almost nothing of the English language. “With the methods of teaching they have now,” said his father, “I do not see how a boy *learns* anything. I really believe,” he added, “that the reason my boy does poorly in his mathematics is because he does not know the language in which it is taught. It would never occur to him to look up a word in the dictionary.” This is the kind of boy who expects in college that form of education which Mr.

Dooley describes when he says: "Th' prisidint takes him into a Turkish room, gives him a cigareet, an' says: 'Me dear boy, what special branch iv larnin' wud ye like to have studied f'r ye be our compitint professors?'" the kind of boy that leads the same philosopher not to care what the children study so long as it is disagreeable to them.

Now and then a man born of the best stock, trained with the best training of an earlier generation, filled with high purpose and noble enthusiasm, fails to see that the average child of today may be swamped by a liberty which to him would be buoyant life. He has learned the triumphant happiness of difficult work well done, and forgets the time when even he, in a school of today, might not have learned it. Let us thank every teacher who has helped us to see that, if we do anything as well as we can and keep on doing it, it must become interesting. I too believe that boys and girls should enjoy education, should love the *work* of it. By and by they must spend the greater part of their waking hours in work; and if they cannot enjoy work, *the* work that lies before them, they will lead unhappy lives. The late Professor Dunbar assigned as one cause of President Eliot's extraordinary success his keen enjoyment of work. Some men live on "the windy and difficult heights," mountain-climbers by instinct and by training; but will the youth of vulgar heritage and custom-made education grapple with the cliffs, or will he light a cigarette and lie down?

I am not attacking the elective system in colleges. I believe with President Tucker that "a considerable amount of unawakened, uninterested mind in our colleges has been recovered by this system;" that "it represents the final appeal to the indifferent student;" and that "it gives responsibility and stimulus to the diligent." Yet its representing the final intellectual appeal is a confession of weakness in some early processes. Besides, if the elective system gets into the grammar school, it will in some measure defeat its own end in the college. It will cut off many a boy from the liberty in whose name it was created, by sending him to college unfit for a number of the elective courses which would otherwise be open to him. Then, if roused at last to an interest in work, he will "feel the weight" of the "chance desires" which led him blindly away from what was to be his goal. Suppose he loves literature, but not language, and in the complacency of youth sets out to be a specialist in literature with "no use," as he says, for the ancient classics: the higher he rises in his specialty, the more keenly he will feel the want of the Greek and Latin which he might have mastered once so much more readily than he can master them now. Or, not to mention Greek and Latin, suppose he loves to write, but not to study grammar: he may be clever and may acquire skill in writing; but the greater his success, the deeper will be his regret, if he comes to write of difficult subjects, that he threw away the opportunity of early grammatical training.

The early studies, I repeat, should be the studies that are at the root of all. These are the right studies for boys whose book-learning stops with the grammar school; they are equally right for boys who will in time be doctors of philosophy. In the hands of a good teacher they are interesting, with no strain on truth; first, because to an awakened mind every study has its charm; and, next, because thru them a good teacher may train a boy to the enjoyment of vigorous work.

I am talking of intellectual work. Sewing for girls and carving for boys are first-rate things and may well be taught in public institutions; but they should not in an American grammar school crowd out intellectual opportunity. As to the hundred pretty and interesting things with which we are tempted to decorate school programs, let us remember that "the foundation must be stronger than the superstructure." "Fine stockings, fine shoes, fine yellow hair," and a "double ruffle round her neck" did not make up in Ducky Dilver's lamented wife for the want of a petticoat; and it is even so with frills in education. Without the essential garments of the mind the frills may become a mockery.

Says Cardinal Newman :

I will tell you, gentlemen, what has been the practical error of the last twenty years [we must add many more years now]. Not to load the memory of the student with a mass of undigested knowledge; but to force upon him so much that he has rejected all. It has been the error of distracting and enfeebling the mind by an unmeaning profusion of subjects; of implying that a smattering in a dozen branches of study is not shallowness, which it really is, but enlargement, which it is not; of considering an acquaintance with the learned names of things and persons, and the possession of clever duodecimos, and attendance on eloquent lecturers, and membership with scientific institutions, and the sight of the experiments of a platform, and the specimens of a museum — that all this was not dissipation of mind, but progress. All things now are to be learned at once; not first one thing and then another; not one well, but many badly. Learning is to be without exertion, without attention, without toil, without grounding, without advance, without finish.

There are youths [says the same great writer] who certainly have a taste for reading, but in whom it is little more than the result of mental restlessness and curiosity. Such minds cannot fix their gaze on one object for two seconds together; the very impulse that leads them to read at all leads them to read on, and never to stay or hang over any one idea. The pleasurable excitement of reading what is new is their motive principle, and the imagination that they are doing something, and the boyish vanity that accompanies it, are their reward. Such youths often profess to like poetry, or to like history or biography; they are fond of lectures on certain of the physical sciences; or they may possibly have a real and true taste for natural history or other cognate subjects; and so far they may be regarded with satisfaction; but, on the other hand, they profess that they do not like logic, they do not like algebra, they have no taste for mathematics; which only means that they do not like application, they do not like attention, they shrink from the effort and labor of thinking, and the process of true intellectual gymnastics. The consequence will be that, when they grow up, they may, if it so happen, be agreeable in conversation; they may be well informed in this or that department of knowledge; they may be what is called literary; but they will have no consistency, steadiness, or perseverance; they will not be able to make a telling speech, or to write a good letter, or to fling in debate a smart antagonist, unless so far as, now

and then, mother-wit supplies a sudden capacity, which cannot be ordinarily counted on. They cannot state an argument or a question, or take a clear survey of a whole transaction, or give sensible and appropriate advice under difficulties, or do any of those things which inspire confidence and gain influence, which raise a man in life, and make him useful to his religion or his country.

Elsewhere Cardinal Newman says :

The displays of eloquence, or the interesting matter contained in their lectures, though admirable in themselves, and advantageous to the student at a later stage of his course, never can serve as a substitute for methodical and laborious teaching. A young man of sharp and active intellect, who has had no other training, has little to show for it besides a litter of ideas heaped up in his mind anyhow. He can utter a number of truths or sophisms, as the case may be; and one is as good to him as another. He is up with a number of doctrines and a number of facts; but they are all loose and straggling, for he has no principles set up in his mind round which to aggregate and locate them. He can say a word or two on half a dozen sciences, but not a dozen words on any one. He says one thing now, and another presently; and when he attempts to write down distinctly what he holds upon a point in dispute, or what he understands by its terms, he breaks down, and is surprised at his failure. He sees objections more clearly than truths, and can ask a thousand questions which the wisest of men cannot answer; and withal he has a very good opinion of himself, and is well satisfied with his attainments, and he declares against others, as opposed to the spread of knowledge altogether, who do not happen to adopt his ways of furthering it, or the opinions in which he considers it to result.

Still again :

But the intellect which has been disciplined to the perfection of its powers, which knows, and thinks while it knows, which has learned to leaven the dense mass of facts and events with the elastic force of reason, such an intellect cannot be partial, cannot be exclusive, cannot be impetuous, cannot be at a loss, cannot but be patient, collected, and majestically calm, because it discerns the end in every beginning, the origin in every end, the law in every interruption, the limit in each delay; because it ever knows where it stands, and how its path lies from one point to another.

Men look at any system of education, and are dissatisfied because no system does for everybody what education should do. They would gather grapes from thorns and figs from thistles. They forget that even the best seed may fall on stony ground or be eaten by the fowls of the air. They forget that no schoolmaster and no school system can make over a boy's ancestors, or banish his temptations, or give eyes to the blind; and they have their visions, their theories, their panaceas; and people rush after their panaceas as people rush after other panaceas, to find that the panacea comes and goes, while the disease abides; and the steadfast old teacher almost loses heart, like the steadfast old physician who sees people stake their money and their lives on a new patent medicine, on irrational healers of all sorts, on people who prescribe from examining locks of hair or from looking at the stars; but by and by he says to himself: "This, too, shall pass. Of the new teachers the dishonest will soon reveal themselves; and from the honestly mistaken some good may come. I will stand by a few things that I know. I know that it is better to concentrate the mind than to dissipate it, to train it than to pamper it. I know that there is no courage and no intellectual joy like the courage and

the joy of that effort which ends in mastery. New systems may come and go. I will take with gratitude whatever in any one of them adds beauty, interest, helpful variety, cultivating influence, any kind of strength or glory, to a task as perplexing as it is noble; yet not for one moment shall I forget that sound training comes before varied accomplishment; that there is no strength and no glory like that of duty steadily and bravely done."

DISCUSSION

DR WILLIAM T. HARRIS, United States Commissioner of Education.¹—Being called out to make some remarks on the general subject of discussion, I shall utter some of the reflections which passed thru my mind as I listened to the fascinating paper which has just now been read.

The objection to the kindergarten which was quoted in the paper reminds me of forebodings which were often published thirty years ago in regard to the kindergarten when the first experiments were in progress in this country. I do not think, however, that experience verified those forebodings, for it would seem that, on the whole, the children from the kindergarten have a more highly developed power of interesting themselves in their regular work than those who have not received kindergarten training. They are, on an average, somewhat better able to help themselves. They do not depend upon the teacher quite so much as the others. It goes without saying that, while this is generally true, there are many exceptions. The difference caused by the training of a good kindergarten is often more than made up for by native talent, or by some species of training obtained in the experience which the child has found in his life; and it must be admitted that some kindergartens of a most unhappy sort have a tendency to develop in children the faculty of getting in the way of each other, and of needing constant supervision on the part of the teacher, who is obliged to interfere with their work.

Most of my reflections related to what the speaker said with reference to formal discipline. I recall vividly my protest in early life against formal discipline in the college. I was told that Latin and Greek were useful as disciplinary studies. In fact, the arguments made for Latin and Greek would seem to apply to Arabic and Sanscrit and languages of the Turanian tribes. I became thoroly tired of all this talk about mental discipline as secured thru the study of dead languages. But in later years I changed my view on this subject, and found that the study of Latin and Greek is generally of great value in one's education. In fact, there is no substitute for Latin and Greek so far as the Anglo-Saxon or any other Teutonic people is concerned, because Latin and Greek are the languages of the two classes of people who have furnished us the most valuable elements that enter our civilization. Our civilization is composite, getting one strand from Greece and one strand from Rome. The languages of those two nationalities belong to the culture-studies of our youth, because they help one to understand the two strands which enter his civilization from those sources. I invented the expression "embryology of civilization" to make clear this thought. Inasmuch as one has to study an animal in its embryology in order to know it scientifically, so, it seemed to me, one has to study his own civilization in its embryology in order to understand it. But I will readily admit that the study of Latin and Greek remains in some instances only a study of embryos, without furnishing valuable concrete results, without strengthening the youth to grapple with the problems of life as they are now. I have seen students at Oxford and Cambridge, resident graduates at those venerable institutions, who had devoted so much time to the embryology of civilization that no leisure or taste remained for the study of the civilization which had hatched out of those embryos.

¹ Revised and extended by the author.

It seems to me that it is a mistake to claim for the study of Latin and Greek a value simply as a mental discipline, for a thoro study of Spanish, or French, or German, or Arabic, or Chinese would develop an equal or greater amount of mental discipline. And hence the modern school might use one of those branches as a substitute for Latin and Greek; but no one of those branches could give the youth an insight into the development of his civilization; he would not be mentally prepared to understand the Roman contribution nor the Greek contribution to the laws and usages of civil society and to the forms of literature and art and science.

This may be taken as a counter-statement to the position set forth by Dean Briggs in his paper. But I had in my own mind a general assent to all that he said, and I was very glad to hear what he said. My suggestion is only that more stress should be laid on the fitness of the college studies to prepare the person for thinking out the problems of later life, and not so much merely on the formal discipline; that is to say, on the mere training of the will to industry. I think that this will be apparent when one considers that mere dogged industry in some branches does not produce the effects that the same industry produces in others. The one who studies Latin and Greek has more insight into human nature as revealed in his own civilization than the one who devotes his life to the study of the native dialects of the Sandwich Islands. The one who learns the higher mathematics has more insight into the laws that control matter and forces in nature than the one who devotes himself exclusively to manual training, but with equally stubborn industry. So, too, the industrious athlete at college does not acquire an ability to combine the human forces of an army of men into an all-conquering unity so much as the study of the branches taught at West Point would do. It is true that Wellington learned to conquer at Waterloo, as he said, from his early experience in the football game at Eton, but it was at the military college that he learned the mathematical principles which gave him an insight into the football game and enabled him to understand how to apply the principles involved in the combination of the football rush on the grand scale of the field of Waterloo.

I have always felt some degree of impatience with my college teachers because they did not impress upon us students the true view in regard to the studies which we pursued—they did not interpret them in the light of civilization. I had accidentally heard something of German philosophy. There was at one American college in the early fifties professors with some insight into the great revolution going on in German thinking; a revolution which was inaugurated by the publication of the great *Critique* of Kant; some insight, I would say, into the upheaval in German thinking which lasted for fifty years or so, namely, until after 1830. This revolution involved not only new insights into all realms of intellect, but also revolutions in statecraft and productive industry. For German thought introduced comparative methods, not only into philosophy and natural science, but also into the study of national economy and civil service. Its far-reaching revolutions became visible to all the world on the fields of Königsgrätz and Sedan, and later they can now be seen in the specialization of German industry, by which the northern nations have learned how to emancipate themselves from a dependence on the tropical population for sugar.

The most important thing, perhaps, is the study of comparative religion, inaugurated by the new German studies in philosophy. But seventy years after the publication of Kant's *Critique* there was only one professor in an American college who possessed an insight into the work sufficient to explain it to a class of students; or, indeed, to advise an earnest-minded young man as to a course of reading on the subject.

I mention this because I think that the narrow view of formal discipline was the cause of this scandalous neglect of philosophy. For not only was German philosophy neglected, but the ancient Greek philosophy fared no better. Very absurd notions prevailed as to the doctrines taught by Plato and Aristotle, and as to their relations to each other. I have always considered it a piece of good fortune to me that I revolted against

formal disciplinary studies and struck out for myself with the vague ambition to master the philosophy of the Germans; a philosophy so difficult that after many months' study I could not tell what any page of it meant.

I hasten to say, in closing, that I admit that there is much good in mere industry and in the discipline of exerting one's will so as to conquer at a piece of work, at the blacksmith's forge, or the carpenter's bench, or in the college boat-race, or in the study of the language of a savage tribe, or in a game of chess; but I wish to affirm that there is great virtue in the branches that form the regular course of study in the college or university. They afford insight as well as discipline.

THE SITUATION AS REGARDS THE COURSE OF STUDY

PROFESSOR JOHN DEWEY, UNIVERSITY OF CHICAGO

Horace Mann and the disciples of Pestalozzi did their peculiar missionary work so completely as intellectually to crowd the conservative to the wall. For half a century after their time the ethical emotion, the bulk of exhortation, the current formulæ and catchwords, the distinctive principles of theory have been found on the side of progress, of what is known as reform. The supremacy of self-activity, the symmetrical development of all the powers, the priority of character to information, the necessity of putting the real before the symbol, the concrete before the abstract, the necessity of following the order of nature and not the order of human convention—all these ideas, at the outset so revolutionary, have filtered into the pedagogic consciousness and become the commonplace of pedagogic writing and of the gatherings where teachers meet for inspiration and admonition.

It is, however, sufficiently obvious that, while the field of theory and enthusiasm and preaching was taken possession of by the reformer, the conservative, so far as the course of study is concerned, was holding his own pretty obstinately in the region of practice. He could afford to neglect all these sayings; nay, he could afford to take a part in a glib reiteration of the shibboleths, because, as a matter of fact, his own work remained so largely untouched. He retained actual control of school conditions; it was he who brought about the final and actual contact between the theories and the child. And by the time the ideals and theories had been translated over into their working equivalents in the curriculum, the difference between them and what he as a conservative really wished and practiced became often the simple difference between tweedle dum and tweedle dee. So the "great big battle" was fought with mutual satisfaction, each side having an almost complete victory in its own field. Where the reformer made his headway was not in the region of studies, but rather in that of methods and atmosphere of school work.

In the last twenty or twenty-five years, however, more serious attempts have been made to carry the theory into effective execution in the school-room, in subject-matter as well as method. The unconscious insincerity

in continually turning the theory over and over in terms of itself, the unconscious self-deceit in using it simply to cast an idealized and emotional halo over a mechanical school routine with which it was fundamentally at odds, became somewhat painfully apparent; consequently the effort to change the concrete school materials and school subject-matter so as to give the professed ends and aims a *pou sto* within the school walls and in relation to the children.

Drawing, music, nature study with the field excursion and the school garden, manual training, the continuation of the constructive exercises of the kindergarten, the story and the tale, the biography, the dramatic episode, and anniversary of heroic history found their way into the school-rooms. We, they proclaim, are the working counterparts of the commands to follow nature; to secure the complete development of the child; to present the real before the symbolic, etc. Interest was transferred from the region of pedagogic principles and ideals, as such, to the child as affected by these principles and ideals. The formulæ of pedagogics were reduced in importance, and the present experience of the child was magnified. The gospel of the emancipation of the child succeeded the gospel of the emancipation of the educational theorist. This gospel was published abroad, and verily its day seemed at hand. It was apparently only a question of pushing a few more old fogies out of the way, and waiting for others to pass out of existence in the natural course of events, and the long-wished-for educational reformation would be accomplished.

Needless to say, the affair was not quite so simple. The conservative was still there. He was there not only as a teacher in the schoolroom, but he was there in the board of education; he was there because he was still in the heart and mind of the parent; because he still possessed and controlled the intellectual and moral standards and expectations of the community. We began to learn that an educational reform is but one phase of a general social modification.

Moreover, certain evils began to show themselves. Studies were multiplied almost indefinitely, often overtaxing the physical and mental strength of both teacher and child, leading to a congestion of the curriculum, to a distraction and dissipation of aim and effort on the part of instructor and pupil. Too often an excess of emotional excitement and strain abruptly replaced the former apathy and dull routine of the school. There were complaints in every community of loss of efficiency in the older studies, and of a letting down of the seriousness of mental training. It is not necessary to consider how well founded these objections have been. The fact that they are so commonly made, the fact that these newer studies are often regarded simply as fads and frills, is sufficient evidence of the main point, viz.: of the external and mechanical position occupied by these studies in the curriculum. Numbers of cities thruout the country point the moral. When the winds blew and the rains fell—

in the shape of a financial stringency in the community and the business conduct of the school—the new educational edifice too often fell. It may not have been built entirely upon the sand, but at all events it was not founded upon a rock. The taxpayer spoke, and somehow the studies which represented the symmetrical development of the child and the necessity of giving him the concrete before the abstract went into eclipse.

It is, of course, agreeable for those who believe in progress, in reform, in new ideals, to attribute these reactions to a hard and stiff-necked generation who willfully refuse to recognize the highest goods when they see them. It is agreeable to regard such as barbarians who are interested simply in turning back the wheels of progress. The simple fact, however, is that education is the one thing in which the American people believe without reserve, and to which they are without reserve committed. Indeed, I sometimes think that the necessity of education is the only settled article in the shifting and confused social and moral creed of America. If, then, the American public fails, in critical cases, to stand by the educational newcomers, it is because these latter have not yet become organic parts of the educational whole—otherwise they could not be cut out. They are not really in the unity of educational movement—otherwise they could not be arrested. They are still insertions and additions.

Consider the wave by which a new study is introduced into the curriculum. Someone feels that the school system of his (or quite frequently nowadays her) town is falling behind the times. There are rumors of great progress in education making elsewhere. Something new and important has been introduced; education is being revolutionized by it; the school superintendent, or members of the board of education, become somewhat uneasy; the matter is taken up by individuals and clubs; pressure is brought to bear on the managers of the school system; letters are written to the newspapers; the editor himself is appealed to to use his great power to advance the cause of progress; editorials appear; finally the school board ordains that on and after a certain date the particular new branch—be it nature study, industrial drawing, cooking, manual training, or whatever—shall be taught in the public schools. The victory is won, and everybody—unless it be some already overburdened and distracted teacher—congratulates everybody else that such advanced steps are taking.

The next year, or possibly the next month, there comes an outcry that children do not write or spell or figure as well as they used to; that they cannot do the necessary work in the upper grades, or in the high school, because of lack of ready command of the necessary tools of study. We are told that they also are not prepared for business, because their spelling is so poor, their work in addition and multiplication so slow and inaccurate, their handwriting so fearfully and wonderfully made. Some zealous soul on the school board takes up this matter; the newspapers are again

heard from ; investigations are set on foot ; and the edict goes forth that there must be more drill in the fundamentals of writing, spelling, and number.

Moreover, in the last year or two there are many signs that the older and traditional studies do not propose to be ignored. For a long time, as already intimated, the conservative was, upon the whole, quite content to surrender the intellectual and emotional territory, the sphere of theory and of warmly toned ideals, to the reformer. He was content because he, after all, remained in possession of the field of action. But now there are symptoms of another attitude ; the conservative is, so to speak, coming to intellectual and moral consciousness himself. He is asserting that in his conservatism he stands for more than the mere customs and traditions of an outworn past. He asserts that he stands for honesty of work, for stability, for thoroness, for singleness of aim and concentration of agencies, for a reasonable simplicity. He is actively probing the innovator. He is asking questions regarding the guarantees of personal and intellectual discipline, of power of control, of ability to work. He is asking whether there is not danger of both teacher and child being lost in the portentous multiplication of studies. He is asking about the leisure requisite to intellectual and mental digestion, and subsequent growth. He is asking whether there is not danger to integrity of character in arousing so many interests and impulses that no one of them is carried thru to an effective result. These are not matters of mere school procedure or formal arrangement of studies, but matters fundamental to intellectual and moral achievement. Moreover, some recent magazine articles seem to indicate that some few, at least, of the reformers are themselves beginning to draw back ; they are apparently wondering if this new-created child of theirs be not a Frankenstein, which is to turn and rend its creator. They seem to be saying : "Possibly we are in danger of going too fast and too far ; what and where are the limits of this thing we have entered upon?"

My sketch, however inadequate, is yet, I hope, true to the logic, if not to the details, of history. What emerges from this running account ? What does it all mean ? Does it not signify that we have a situation in process of forming rather than a definitive situation ? The history reflects both our lack of intellectual organization and the developing recognition of the factors which must enter into any such organization. From this point of view, the renewed self-assertion, from the standpoint of theory, of the adherents of the traditional curriculum is a matter of congratulation. It shows that we are emerging from the period of practical struggle to that of intellectual interpretation and adjustment. As yet, however, we have no conscious educational standard by which to test and place each aspiring claimant. We have hundreds of reasons for and against this or that study, but no reason. Having no sense of the unity of experience, and of the definitive relation of each branch of study to

that unity, we have no criterion by which to judge and decide. We yield to popular pressure and clamor ; first on the side of the instinct for progress, and then on the side of the habit of inertia. As a result, every movement, whether for nature study or spelling, for picture study or arithmetic, for manual training or more legible handwriting, is treated as an isolated and independent thing. It is this separation, this lack of vital unity, which leads to the confusion and contention which are so marked features of the educational situation. Lacking a philosophy of unity, we have no basis upon which to make connections, and our whole treatment becomes piecemeal, empirical, and at the mercy of external circumstances.

The problem of the course of study is thus, in effect, a part of the larger problem so pressing in all departments of the organization of life. Everywhere we have outgrown old methods and standards ; everywhere we are crowded by new resources, new instrumentalities ; we are bewildered by the multitude of new opportunities that present themselves. Our difficulties of today come, not from paucity or poverty, but from the multiplication of means clear beyond our present powers of use and administration. We have got away from the inherited and customary ; we have not come into complete possession and command of the present. Unification, organization, harmony, is the demand of every aspect of life—politics, business, science. That education shares in the confusion of transition, and in the demand for reorganization, is a source of encouragement and not of despair. It proves how integrally the school is bound up with the entire movement of modern life.

The situation thus ceases to be a conflict between what is called the old education and the new. There is no longer any old education, save here and there in some belated geographic area. There is no new education in definitive and supreme existence. What we have is certain vital tendencies. These tendencies ought to work together ; each stands for a phase of reality and contributes a factor of efficiency. But because of lack of organization, because of the lack of unified insight upon which organization depends, these tendencies are diverse and tangential. Too often we have their mechanical combination and irrational compromise. More prophetic, because more vital, is the confusion which arises from their conflict. We have been putting new wine into old bottles, and that which was prophesied has come to pass.

To recognize that the situation is not the wholesale antagonism of so-called old education by the so-called new, but a question of the co-operative adjustment of necessary factors in a common situation, is to surrender our partisanship. It is to cease our recriminations and our self-conceits, and search for a more comprehensive end than is represented by either factor apart from the other. It is impossible to anticipate the exact and final outcome of this search. Only time, and the light that comes with time, can reveal the answer. The first step, however, is to

study the existing situation impartially, as students, not as partisans, and, having located the vital factors in it, consider what it is that makes them at the present juncture antagonistic competitors instead of co-operative forces.

The question is just this: Why do the newer studies, drawing, music, nature study, manual training; and the older studies, the three R's, practically conflict with, instead of reinforcing, one another? Why is it that the practical problem is so often simply one of outward annexation or mechanical compromise? Why is it that the adjustment of the conflict is left to the mere push and pull of contending factors, to the pressure of local circumstances and of temporary reactions?

An answer to this question is, I believe, the indispensable preliminary to any future understanding. Put roughly, we have two groups of studies; one represents the symbols of the intellectual life, which are the tools of civilization itself; the other group stands for the direct and present expression of power on the part of one undergoing education, and for the present and direct enrichment of his life-experience. For reasons historically adequate, the former group represents the traditional education; the latter, the efforts of the innovator. Intrinsically speaking, in the abstract, there is no reason to assume any fundamental, or even any minor, antagonism between these two groups. Such an assumption would mean that the requirements of civilization are fundamentally at war with the conditions of individual development; that the agencies by which society maintains itself are at radical odds with the forms by which individual experience is deepened and expanded. Unless we are ready to concede such a fundamental contradiction in the make-up of life, we must hold that the present contention is the result of conditions which are local and transitory.

I offer the following proposition as giving the key to the conflict:

The studies of the symbolic and formal sort represented the aims and material of education for a sufficiently long time to call into existence a machinery of administration and of instruction thoroly adapted to themselves. This machinery constituted the actual working scheme of administration and instruction. The conditions thus constituted persist long after the studies to which they are well adapted have lost their theoretical supremacy. The conflict, the confusion, the compromise, is not intrinsically between the older group of studies and the newer, but between the external conditions in which the former were realized and the aims and standards represented by the newer.

It is easy to fall into the habit of regarding the mechanics of school organization and administration as something comparatively external and indifferent to educational purposes and ideals. We think of the grouping of children in classes, the arrangement of grades, the machinery by which the course of study is made out and laid down, the method by which it is carried into effect, the system of selecting teachers and of

assigning them to their work, of paying and promoting them, as, in a way, matters of mere practical convenience and expediency. We forget that it is precisely such things as these that really control the whole system, even on its distinctively educational side. No matter what is the accepted precept and theory, no matter what the legislation of the school board or the mandate of the school superintendent, the reality of education is found in the personal and face-to-face contact of teacher and child. The conditions that underlie and regulate this contact dominate the educational situation.

In this contact, and in it alone, can the reality of current education be got at. To get away from it is to be ignorant and to deceive ourselves. It is in this contact that the real course of study, whatever be laid down on paper, is actually found. Now, the conditions that determine this personal relationship are, upon the whole, the survival of the period when the domination of the three R's was practically unquestioned. Their effectiveness lies in their adaptation to realizing the ends and aims of that form of education. They do not lend themselves to realizing the purposes of the newer studies. Consequently we never get the full benefit either of the old or of the new studies. They work at cross-purposes. The excellence which the conditions would possess if they were directed solely at securing progress in reading, writing, and arithmetic, and allied topics, is lost because of the introduction of material irrelevant and distracting from the standpoint of the conditions. The new studies do not have an opportunity to show what they can do because hampered by machinery constructed for turning out another kind of goods; they are not provided with their own distinctive set of instrumentalities. Granted this contradiction, the only wonder is that the chaos is not greater than it actually is; the only wonder is that we are securing such positive results as actually come about.

Let us study this contradiction somewhat more intimately, taking up one by one some of its constituent elements. On the side of the machinery of school work I mention first the number of children in a room. This runs in the graded schools of our country anywhere from thirty-five to sixty. This can hardly be said to be an ideal condition, even from the standpoint of uniform progress in reading, writing, and arithmetic, and the symbols of geography and history; but it certainly is indefinitely better adapted to securing these results than that of the symmetrical and complete development of all the powers, physical, mental, moral, æsthetic, of each individual child out of the entire fifty. From the standpoint of the latter aim, the discrepancy is so great that the situation is either ridiculous or tragic. Under such circumstances, how do we have the face to continue to speak at all of the complete development of the individual as the supreme end of educational effort? Excepting here and there with the genius who seems to rise above all conditions, the school environment

and machinery almost compel the more mechanical features of school-work to lord it over the more vital aims.

We get the same result when we consider, not the number of children in a given grade, but the arrangement of grades. The distribution into separate years, each with its own distinctive and definite amount of ground to be covered, the assignment of one and only one teacher to a grade, the confinement of the same teacher to the same grade year by year, save as she is "promoted" to a higher grade, introduce an isolation which is fatal, I will not say to good work, but to the effective domination of the ideal of continuous development of character and personal powers. The unity and wholeness of the child's development can be realized only in a corresponding unity and continuity of school conditions. Anything that breaks the latter up into fractions, into isolated parts, must have the same influence upon the educative growth of the child.¹

It may, however, be admitted that these conditions, while highly important as regards the aims of education, have little or nothing to do with the course of study—with the subject-matter of instruction. But a little reflection will show that the material of study is profoundly affected. The conditions which compel the children to be dealt with *en masse*, which compel them to be led in flocks, if not in hordes, make it necessary to give the stress of attention to those studies in which some sort of definite result can be most successfully attained, without much appeal to individual initiative, judgment, or inquiry. Almost of necessity, attention to the newer studies whose value is dependent upon personal appropriation, assimilation, and expression is incidental and superficial. The results with the latter are naturally often so unsatisfactory that they are held responsible for the evil consequences; we fail to trace the matter back to the conditions which control the result reached. Upon the whole, it is testimony to the vitality of these studies that in such a situation the results are not worse than they actually are.

Unless the teacher has opportunity and occasion to study the educative process as a whole, not as divided into eight or twelve or sixteen parts, it is impossible to see how he can deal effectively with the problem of the complete development of the child. The restriction of outlook to one limited year of the child's growth will inevitably tend in one of two directions: either the teacher's work becomes mechanical, because practically limited to covering the work assigned for the year, irrespective of its nutritive value in the child's growth; or else less local and transitive phases of the child's development are seized upon—phases which too often go by the name of the interests of the child—and these are exaggerated out of all due bounds. Since the newer studies give most help in making this excessive and sensational appeal, these studies are held responsible for the evils that subsequently show themselves. As a matter

¹ I am indebted to MRS. ELLA F. YOUNG's thesis *Isolation in the School* for many suggestions.

of fact, the cause of the difficulty lies in the isolation and restriction of the work of the teacher which practically forbids his considering the significance of art, music, and nature study in the light of continuity and completeness of growth.

This unity and completeness must, however, be cared for somehow. Since not looked out for on the basis of the teacher's knowledge of the whole process of which his own work is one organic member, it is taken care of thru external supervision and the mechanics of examination and promotion. Connection must somehow be made between the various fractional parts—the successive grades. The supervisor, the principal, is the recourse. Acting, however, not thru the medium of the consciousness of the class-room teacher, but thru the medium of external prescription and advice, the inevitable tendency is to arrest attention upon those parts of the subject-matter which lend themselves to external assignment and conjunction. Even music, drawing, and manual training are profoundly influenced by this fact. Their own vital aims and spirit are compromised, or even surrendered, to the necessities for laying out a course of study in such a manner that one year's work may fit externally into that of the next. Thus they part with much of their own distinctive and characteristic value, and become, to a considerable extent, simple additions to the number of routine studies carried by children and teacher. They serve no new purpose of their own, but add to the burden of the old. It is no wonder that, when the burden gets too great, there is demand that they be lopped off as excrescences upon the educational system.

The matter of promotion from grade to grade has a precisely similar effect upon the course of study. It is, from the standpoint of the child, just what the isolation and external combination already alluded to are from the side of the teacher. The things of the spirit do not lend themselves easily to that kind of external inspection which goes by the name of examination. They do not lend themselves easily to exact quantitative measurement. Technical proficiency, acquisition of skill and information, present much less difficulty. So again emphasis is thrown upon those traditional subjects of the school curriculum which permit most readily of a mechanical treatment—upon the three R's and upon the facts of external classification in history and science, matters of formal technique in music, drawing, and manual training. Continuity, order, must be somehow maintained—if not the order and method of the spirit, then at least of external conditions. Nothing is gained by throwing everything into chaos. In this sense the conservative is thoroly right when he insists upon the maintenance of the established traditions of the school as regards the tests of the pupil's ability and preparation for promotion. He fails, however, to recognize the other alternative: that the looseness and confusion, the vagueness in accomplishment and in test of

accomplishment of which he complains, may be due, not to the new studies themselves, but to the unfit conditions under which they operate.

I have already alluded to the fact that at present the teacher is hardly enabled to get a glimpse of the educative process as a whole, and accordingly is reduced to adding together the various external bits into which that unity is broken. We get exactly the same result when we consider the way in which the course of study is determined. The fact that this is fixed by board of education, superintendent, or supervisor, by a power outside the teacher in the class-room who alone can make that course of study a living reality, is a fact too obvious to be concealed. It is, however, comparatively easy to conceal from ourselves the tremendous import of this fact. As long as the teacher, who is after all the only real educator in the school system, has no definite and authoritative position in shaping the course of study, that is likely to remain an external thing to be externally applied to the child.

A school board or a superintendent can lay out a course of study down to the point of stating exactly the number of pages of text-books to be covered in each year, each term and month of the year. It may prescribe the exact integers and fraction of integers with which the child shall make scholastic acquaintance during any period of his instruction; it may directly or indirectly define the exact shapes to be reproduced in drawing, or mention the exact recipes to be followed in cooking. Doubtless the experience of the individual teacher who makes the connections between these things and the life of the child will receive incidental attention in laying out these courses. But, so long as the teacher has no definite voice, the attention will be only incidental; and, as a further consequence, the average teacher will give only incidental study to the problems involved. If his work is the task of carrying out the instructions imposed upon him, then his time and thought must be absorbed in the matter of execution. There is no motive for interest, of a thoroly vital and alert sort, in questions of the intrinsic value of the subject-matter and its adaptation to the needs of child growth. He may be called upon by official requirements, or the pressure of circumstance, to be a student of pedagogical books and journals; but conditions relieve him of the necessity of being a student of the most fundamental educational problems in their most urgent reality.

The teacher needs to study the mechanics of successfully carrying into effect the prescribed matter of instruction; he does not have to study that matter itself, or its educative bearing. Needless to say, the effect of this upon the actual course of study is to emphasize the thought and time given to those subjects, and phases of subjects, where there is most promise of success in doing the exact things prescribed. The three R's are again magnified, and the technical and routine aspects of the newer studies tend to crowd out those elements that give them their

deeper significance in intellectual and moral life. Since, however, the school must have relief from monotony, must have "interest," must have diversification and recreation, these studies become too easily tools for the introduction of the supposedly necessary excitement and amusement of the child. The judicious observer, who sees below the surface, but not to the foundation, again discounts these studies. Meanwhile the actual efficiency of the three R's is hampered and lessened by the super-addition of the new ways of employing time, whether they be routine or exciting in character.

It may easily be said that the class-room teacher at present is not sufficiently educated to be intrusted with any part in shaping a course of study. I waive the fundamental question—the question of democracy—whether the needed education can be secured without giving more responsibility even to the comparatively uneducated. The objection suggests another fundamental condition in our present school procedure—the question of the status of the teacher as regards selection and appointment.

The real course of study must come to the child from the teacher. What gets to the child is dependent upon what is in the mind and consciousness of the teacher, and upon the way it is in his mind. It is thru the teacher that the value even of what is contained in the text-book is brought home to the child; just in the degree in which the teacher's understanding of the material of the lessons is vital, adequate, and comprehensive, will that material come to the child in the same form; in the degree in which the teacher's understanding is mechanical, superficial, and restricted, the child's appreciation will be correspondingly limited and perverted. If this be true, it is obviously futile to plan large expansions of the studies of the curriculum beyond the education of the teacher. I am far from denying the capacity on the part of truth above and beyond the comprehension of the teacher to filter thru to the mind of an aspiring child; but, upon the whole, it is certain beyond controversy that the success of the teacher in teaching, and of the pupil in learning, will depend upon the intellectual equipment of the teacher.

To put literature into a course of study quite irrespective of the teacher's personal appreciation of literary values—to say nothing of accurate discrimination as to the facts—is to go at the matter from the wrong end. To enact that at a given date all the grades of a certain city shall have nature study is to invite confusion and distraction. It would be comic (if it were not tragic) to suppose that all that is required to make music and drawing a part of the course of study is to have the school board legislate that a certain amount of the time of the pupil, covering a certain prescribed ground, shall be given to work with pencil and paper, and to musical exercises. There is no magic by which these things can pass over from the printed page of the school manual to the child's consciousness. If the teacher has no standard of

value in relation to them, no intimate personal response of feeling to them, no conception of the methods of art which alone bring the child to a corresponding intellectual and emotional attitude, these studies will remain what precisely they so often are—passing recreations, modes of showing off, or exercises in technique.

The special teacher has arisen because of the recognition of the inadequate preparation of the average teacher to get the best results with these newer subjects. Special teaching, however, shifts rather than solves the problem. As already indicated, the question is a twofold one. It is a question, not only of *what* is known, but of *how* it is known. The special instructor in nature study or art may have a better command of the what—of the actual material to be taught—but be deficient in the consciousness of the relations borne by that particular subject to other forms of experience in the child, and, therefore, to his own personal growth. When this is the case we exchange King Log for King Stork. We exchange an ignorant and superficial teaching for a vigorous but one-sided, because over-specialized, mode of instruction. The special teacher in manual training or what not, having no philosophy of education—having, that is, no view of the whole of which his own subject is a part—isolates that study and works it out wholly in terms of itself. His beginning and his end, as well as the intermediate materials and methods, fall within manual training. This may give technical facility, but it is not (save incidentally) education.

This is not an attack upon special or departmental teaching. On the contrary, I have just pointed out that this mode of teaching has arisen absolutely in response to the demands of the situation. Since our present teachers are so largely an outcome of the older education, the so-called all-around teacher is for the most part a myth. Moreover, it is a mistake to suppose that we can secure the all-around teacher merely by instructing him in a larger number of branches. In the first place, human capacity is limited. The person whose interests and powers are all-around is not as a rule teaching in grade schools. He is at the head of the great scientific, industrial, and political enterprises of civilization. But granted that the average teacher could master ten distinct studies as well as five, it still remains true that without intellectual organization, without definite insight into the relation of these studies to one another and to the whole of life, without ability to present them to the child from the standpoint of such insight, we simply add an overburdened and confused teacher to the overburdened and confused child. In a word, to make the teaching in the newer studies thoroly effective, whether by specialists or by the all-around teacher, there must, in addition to knowledge of the particular branch, be sanity, steadiness, and system in the mental attitude of the instructor. It is folly to suppose that we can carry on the education of the child apart from the education of the teacher.

If I were to touch upon certain other matters fundamentally connected with the problem of securing the teachers who make the nominal course of study a reality, I should be started upon an almost endless road. However, we must not pass on without at least noticing that the question is one of political, as well as of intellectual, organization. An adequate view of the whole situation would take into account the general social conditions upon which depends the actual supplying of teachers to the schoolroom. The education of the candidate, of the would-be teacher, might be precisely that outlined above, and yet it would remain, to a large extent, inoperative, if the appointment of school-teachers was at the mercy of personal intrigue, political bargaining, and the effort of some individual or class to get power in the community thru manipulation of patronage. It is sentimental to suppose that any large and decisive reform in the course of study can take place as long as such agencies influence what actually comes in a living way to the life of the child.

Nor in a more comprehensive view could we be entirely silent upon the need of commercial as well as political reform. Publishing companies affect not only the text-books and apparatus, the garb with which the curriculum clothes itself, but also and in direct fashion the course of study itself. New studies are introduced because some pushing firm, by a happy coincidence, has exactly the books which are needed to make that study successful. Old studies which should be entirely displaced (if there be any logic in the introduction of the new one) are retained because there is a vested interest behind them. Happy is the large school system which is free from the congestion and distraction arising from just such causes as these. And yet there are those who discuss the relative merits of what they are pleased to call old and new education as if it were purely an abstract and intellectual matter.

But we cannot enter upon these larger phases. It is enough if we recognize the typical signs indicating the impossibility of separating either the theoretical discussion of the course of study or the problem of its practical efficiency from intellectual and social conditions which at first sight are far removed; it is enough if we recognize that the question of the course of study is a question in the organization of knowledge, in the organization of life, in the organization of society. And, for more immediate purposes, it is enough to recognize that certain conditions imbedded in the present scheme of school administration affect so profoundly results reached by the newer studies, by manual training, art and nature study, that it is absurd to discuss the value or lack of value of the latter, without taking these conditions into account. I recur to my original proposition: that these studies are not having their own career, are not exhibiting their own powers, but are hampered and compromised by a school machinery originated and developed with reference to quite different ends and aims. The real conflict is not between a certain group

of studies, the three R's, those having to do with the symbols and tools of intellectual life, and other studies representing the personal development of the child, but between our professed ends and the means we are using to realize these ends.

The popular assumption, however, is to the contrary. It is still the common belief (and not merely in popular thought, but among those who profess to speak with authority) that the two groups of studies are definitely opposed to each other in their aims and methods, in the mental attitude demanded from the child, in the kind of work called for from the instructor. It is assumed that we have a conflict between one group of studies dealing only with the forms and symbols of knowledge, studies to be mastered by mechanical drill, and between those which appeal to the vital concerns of child life and afford present satisfaction. This assumed opposition has been so clearly stated in a recent educational document that I may be pardoned quoting at length:

In regard to education we may divide the faculties into two classes—the doing faculties and the thinking faculties. By the doing faculties I mean those mechanical habits which are essential to the acquisition of knowledge, and are pure arts, such as the art of reading; that of performing arithmetical operations with rapidity and correctness; that of expressing thoughts in legible characters, and in words of grammatical arrangement. These arts can only be acquired by laborious drilling on the part of the teacher, and labor on the part of the pupil. They require little instruction, but repetition until they are performed with ease and almost pleasure. To neglect to impart these habits is to do a great injury to the child; nothing should be substituted for them, though instruction in other branches which require more thought and less art may be mingled as recreations with them.

I have never seen so condensed and comprehensive a statement of the incompatibility of aims and method for both teacher and pupil as is given here. On one side we have “doing faculties,” by which is meant powers of pure external efficiency. These find their expression in what are termed “arts,” which is interpreted to mean purely mechanical habits—sheer routine facility. These are acquired by continued drill on the part of the teacher, and continued laborious repetition on the part of the child. Thought is not required in the process, nor is the result “instruction”—that is, a real building up of the mind; the outcome is simply command of powers, of value not in themselves, but as tools of further knowledge, as “essential to the acquisition of knowledge.” The scheme of contrasting studies is not so well developed. It is made clear, however, that they appeal to thought, not to mechanical habits, and that they proceed by instruction, not by drill. It is further implied that their exercise is attended not so much with labor as with pleasure on the part of the child—which may be interpreted to mean that they have a present value in the life of the child, and are not mere instrumentalities of further advancement. The situation as regards school work is contained in the proposition that the mechanical facilities based upon sheer drill

and laborious repetition must make up the bulk of the elementary education, while the studies which involve thought, the furnishing of the mind itself, and result in a direct expansion of life, "may be mingled as recreations." They may be permitted, in other words, in the schoolroom as an occasional relief from the laborious drill of the more important studies.

Here is the dividing wall. The wall has been somewhat undermined; breaches have been worn in it; it has, as it were, been bodily pushed along until the studies of thought, of instruction, and of present satisfaction occupy a greater bulk of school time and work. But the wall is still there. The mechanical habits that are essential to the acquisition of knowledge, the art of reading, of performing arithmetical operations, and of expressing thought legibly and grammatically, are still the serious business of the schoolroom. Nature study, manual training, music, and art are incidents introduced because of the interests they provide, because they appeal to ability to think, arouse general intelligence, and add to the fund of information. A house divided against itself cannot stand. If the results of our present system are not altogether and always satisfactory, shall we engage in crimination and recrimination—setting the old studies against the new and the new against the old—or shall we hold responsible the organization, or lack of organization, intellectual and administrative, in the school system itself? If the old bottles will not hold the new wine, it is conceivable that we should blame neither the bottles nor the wine, but conditions which have brought the two into mechanical and external relation to each other.

If my remarks in dwelling upon the split and contradiction in the present situation appear to take an unnecessarily gloomy view of the situation, it should be remembered that this view is optimism itself as compared with the theory which holds that the two groups of studies are radically opposed to each other in their ends, results, and methods. Such a theory holds that there is a fundamental contradiction between the present and the future needs of the child, between what his life requires as immediate nutritive material and what it needs as preparation for the future. It assumes a fundamental conflict between that which nourishes the spirit of the child and that which affords the instrumentalities of social progress. The practical consequences are as disastrous as the logical split is complete. If the opposition be an intrinsic one, then the present conflict and confusion in the schoolroom are permanent and not transitory. We shall be forever oscillating between extremes: now lending ourselves with enthusiasm to the introduction of art and music and manual training, because they give vitality to the school work and relief to the child; now querulously complaining of the evil results reached, and insisting with all positiveness upon the return of good old days when reading, writing, spelling, and arithmetic were adequately taught. Since by the theory there is no possibility of an organic connection, of co-operative

relation, between the two types of study, the relative position of each in the curriculum must be decided from arbitrary and external grounds; by the wish and zeal of some strong man, or by the pressure of temporary popular sentiment. At the best we can get only a compromise; at the worst we get a maximum of routine with a halo of sentiment thrown about it, or a great wish-wash of superficiality covering up the residuum of grind.

As compared with such a view, the conception that the conflict is not inherent in the studies themselves, but arises from maladjustment of school conditions, from survival of a mode of educational administration that was adapted to different ends from those which now appeal to us, is encouragement itself. The problem becomes first an intellectual and then a practical one. Intellectually what is needed is a philosophy of organization; a view of the organic unity of the educative process and educative material, and of the place occupied in this whole by each of its own parts. We need to know just what reading and writing and number do for the present life of the child, and how they do it. We need to know what the method of mind is which underlies subject-matter in cooking, shop-work, and nature study, so that they may become effective for discipline, and not mere sources of present satisfaction and mere agencies of relief—so that they too may become as definitely modes of effective preparation for the needs of society as reading, writing, and arithmetic have ever been.

With our minds possessed by a sane and coherent view of the whole situation, we may attempt such a gradual, yet positive, modification of existing procedure as will enable us to turn theory into practice. Let us not be too precipitate, however, in demanding light upon just what to do next. We should remember that there are times when the most practical thing is to face the intellectual problem, and to get a clear and comprehensive survey of the theoretical factors involved. The existing situation, with all its rigidity and all its confusion, will nevertheless indicate plenty of points of leverage, plenty of intelligent ways of straightening things out, to one who approaches it with any clear conviction of the ends he wishes to reach, and of the obstacles in the way. An enlightenment of vision is the prerequisite of efficiency in conduct. The conservative may devote himself to the place of reading and writing and arithmetic in the curriculum so that they shall vitally connect with the present needs of the child's life, and afford the satisfaction that always comes with the fulfillment, the expression, of present power. The reformer may attack the problem, not at large and all over the entire field, but at the most promising point, whether it be art or manual training or nature study, and concentrate all his efforts upon educating alike the community, the teacher, and the child into the knowledge of fundamental methods of individual mind and of community life embodied in that study. All can devote

themselves to the problem of the better education of the teacher, and doing away with the hindrances to placing the right teacher in the school-room; to the hindrances of continued growth after he is placed there. The American people believe in education above all else, and when the educators have come to some agreement as to what education is, the community will not be slow in placing at their disposal the equipment and resources necessary to make their ideal a reality.

In closing let me say that I have intentionally emphasized the obstacles to further progress, rather than congratulated you upon the progress already made. The anomaly and confusion have, after all, been of some use. In some respects the blind conflict of the last two generations of educational history has been a better way of changing the conditions than would have been some wholesale and *a priori* rearrangement. The forms of genuine growth always come slowly. The struggle of the newer studies to get a foothold in the curriculum, with all the attendant confusion, is an experiment carried out on a large scale; an experiment in natural selection, in the survival of the fit in educational forms.

Yet there must come a time when blind experimentation is to give way to something more directed. The struggle should bring out the factors in the problem so that we can go more intelligently to work in its solution. The period of blind striving, of empirical adjustment, trying now this and now that, making this or that combination because it is feasible for the time being, of advancing here and retreating there, of giving headway now to the instinct of progress and now to the habit of inertia, should find an outcome in some illumination of vision, in some clearer revelation of the realities of the situation. As this comes, the time grows ripe for scientific experimentation; that is, for a more organized philosophy of experience in education, and for a corresponding attempt to regulate conditions so as to make actual the aims recognized as desirable. It is uneconomical to prolong the period of conflict between incompatible tendencies. It makes for intellectual hypocrisy to suppose that we are doing what we are not doing. It weakens the nerve of judgment and the fiber of action to submit to conditions which prevent the realization of aims to which we profess ourselves to be devoted.

My topic is the situation as regards the course of study. In a somewhat more limited and precise view than I have previously taken of the situation, I believe we are now nearing the close of the time of tentative, blind, empirical experimentation; that we are close to the opportunity of planning our work on the basis of a coherent philosophy of experience and of the relation of school studies to that experience; that we can accordingly take up steadily and wisely the effort of changing school conditions so as to make real the aims that command the assent of intelligence.

NATIONAL COUNCIL OF EDUCATION

CONSTITUTION

PREAMBLE

The National Council of Education shall have for its object the consideration and discussion of educational questions of general interest and public importance, and the presentation, thru printed reports, of the substance of the discussions, and the conclusions formulated. It shall be its object to reach and disseminate correct thinking on educational questions; and, for this purpose, it shall be the aim of the Council, in conducting its discussions, to define and state with accuracy the different views and theories on the subject under consideration, and, secondly, to discover and represent fairly the grounds and reasons for each theory or view, so far as to show, as completely as possible, the genesis of opinion on the subject. It shall be the duty of the Council, in pursuance of this object, to encourage from all its members the most careful statement of differences in opinion, together with the completest statement of grounds for the same. It shall further require the careful preservation and presentation of the individual differences of opinion, whenever grounds have been furnished for the same by members of the Council. It shall invite the freest discussion and embody the new suggestions developed by such discussions. Any member making such suggestion or objection may put in writing his view, and the grounds therefor, and furnish the same to the secretary for the records of the Council. It shall prepare, thru its president, an annual report to the National Educational Association, setting forth the questions considered by the Council during the previous year, and placing before the association, in succinct form, the work accomplished. It shall embody in this report a survey of those educational topics which seem to call for any action on the part of the association. The Council shall appoint, out of its own number, committees representing the several departments of education, and thereby facilitate the exchange of opinion among its members on such special topics as demand the attention of the profession or of the public.

ARTICLE I—MEMBERSHIP

1. The National Council of Education shall consist of sixty members, selected from the membership of the National Educational Association. Any member of the association identified with educational work is eligible to membership in the Council, and after the first election such membership shall continue for six years, except as hereinafter provided.

2. In the year 1885 the Board of Directors shall elect eight members—four members for six years, two for four years, and two for two years; and the Council shall elect eight members—five members for six years, two for four years, and one for two years; and annually thereafter the Board of Directors shall elect five members and the Council five members, each member, with the exception hereinafter provided for (section 5), to serve six years, or until his successor is elected.

3. The annual election of members of the Council shall be held in connection with the annual meetings of the association. If the Board of Directors shall fail, for any

reason, to fill its quota of members annually, the vacancy or vacancies shall be filled by the Council.

4. The term of service of the several members of the Council chosen at the first election shall be arranged by the Executive Committee of the Council.

5. The absence of a member from two consecutive annual meetings of the Council shall be considered equivalent to resignation of membership, and the Council shall fill vacancies caused by absence from the Council as herein defined, as well as vacancies caused by death or resignation, for the unexpired term. All persons who have belonged to the Council shall, on the expiration of their membership, become honorary members, with the privilege of attending its regular sessions, and participating in its discussions. No state shall be represented in the Council by more than eight members.

ARTICLE II—QUALIFICATION FOR MEMBERSHIP

All members of the Council shall be either life or active members of the National Educational Association.

ARTICLE III—MEETINGS

There shall be a regular annual meeting of the Council held at the same place as the meeting of the National Educational Association, and at least two days previous to this meeting. There may be special meetings of the Council, subject to the call of the Executive Committee, but the attendance at these meetings shall be entirely voluntary. A majority of the Council shall constitute a quorum for the transaction of business at any meeting, whether regular or called; but any less number, exceeding eight members, may constitute a quorum for the transaction of business at the regular annual meeting, as defined in this article.

ARTICLE IV—THE WORK OF THE COUNCIL

The Council shall, from time to time, undertake to initiate, conduct, and guide the thoro investigation of important educational questions originating in the Council; also to conduct like investigations originating in the National Educational Association, or any of its departments, and requiring the expenditure of funds.

ARTICLE V—THE APPOINTMENT OF SPECIAL COMMITTEES AND EXPERTS

In the appointments of special committees, and in the selection of writers and speakers, it shall be the privilege of the Council to appoint such experts, whether members of the Council or not, as are deemed best qualified to conduct investigations.

ARTICLE VI—THE PROGRAM

It shall be the duty of the president of the Council to prepare, with the assistance and approval of the Executive Committee, such a program for the annual meeting as shall realize as fully as practicable the purposes for which the Council was organized and exists.

ARTICLE VII—STANDING COMMITTEES

1. There shall be three standing committees: an Executive Committee, a Committee on Membership, and a Committee on Educational Progress.

2. The Executive Committee shall be composed of the president of the Council and of three other members, whose terms of office shall be so arranged that one new member may be chosen each year, beginning with the year 1899.

3. It shall be the duty of the Executive Committee to provide an annual program by selecting, whenever feasible, subjects for investigation, and appointing committees to

conduct such investigations. It shall be the duty of the Executive Committee to carry out the provisions contained in this constitution referring to volunteer and invited papers. It shall be the duty of the Executive Committee to provide a place on the program for the report on any investigation which may be ordered by the National Educational Association or its departments.

4. The Committee on Membership shall be composed of the president of the Council and six other members, whose terms of office shall be so arranged that two vacancies may be filled every year, beginning with 1899.

5. There shall be appointed annually a committee of one to submit, at the next meeting, a report on "Educational Progress During the Past Year," in which a survey of the important movements and events in education during the preceding year is given. This committee need not be selected from the members of the Council.

ARTICLE VIII—THE DUTIES OF THE COUNCIL

1. It shall be the duty of the Council to further the objects of the National Educational Association, and to use its best efforts to promote the cause of education in general.

2. The meetings of the Council shall be, for the most part, of a "round table" character.

ARTICLE IX—AMENDMENTS

This constitution may be altered or amended at a regular meeting of the Council, by a two-thirds vote of the members present, and any provision may be waived at any regular meeting by unanimous consent.

By-laws not in violation of this constitution may be adopted by a two-thirds vote of the Council.

OFFICERS, STANDING COMMITTEES, MEMBERS

OFFICERS FOR 1900-1901

CHARLES M. JORDAN.....	Minneapolis, Minn.	<i>President</i>
Miss BETTIE A. DUTTON	Cleveland, O.	<i>Vice-President</i>
J. H. PHILLIPS.....	Birmingham, Ala.....	<i>Secretary</i>

EXECUTIVE COMMITTEE

The President, <i>ex officio</i>		
Elmer E. Brown, Berkeley, Cal.....	Term expires in 1901	
Nicholas Murray Butler, New York, N. Y.	Term expires in 1902	
Joseph Swain, Bloomington, Ind.	Term expires in 1903	

OFFICERS FOR 1901-1902

J. H. PHILLIPS	Birmingham, Ala.....	<i>President</i>
Miss MARY E. NICHOLSON	Indianapolis, Ind.	<i>Vice-President</i>
J. F. MILLSPAUGH	Winona, Minn.	<i>Secretary</i>

EXECUTIVE COMMITTEE

The President, <i>ex officio</i>		
Nicholas Murray Butler, New York, N. Y.	Term expires in 1902	
Joseph Swain, Bloomington, Ind.	Term expires in 1903	
Richard G. Boone, Cincinnati, O.....	Term expires in 1904	

OFFICERS FOR 1901-1902—*continued*

COMMITTEE ON MEMBERSHIP

The President, *ex officio*

J. M. Greenwood, Kansas City, Mo.....	Term expires in 1903
J. H. Van Sickle, Baltimore, Md.....	Term expires in 1903
W. T. Harris, Washington, D. C.....	Term expires in 1905
E. E. White, Columbus, O.....	Term expires in 1905
Vacant by reason of non-election.....	Term expires in 1907
L. D. Harvey, Madison, Wis.....	Term expires in 1907

MEMBERS

NOTE: The letter "A" following a name denotes that the member is of the class elected by the association; the letter "C," by the Council.

<i>Term expires</i>	<i>Term expires</i>
*Charles F. Thwing, Cleveland, O..... A 1902	*W. H. Bartholomew, Louisville, Ky..... A 1905
*Albert G. Lane, Chicago, Ill..... A 1902	*Frank A. Fitzpatrick, Boston, Mass..... A 1905
Edwin A. Alderman, New Orleans, La. . . A 1902	*I. C. McNeill, West Superior, Wis..... A 1905
*Charles M. Jordan, Minneapolis, Minn. . . A 1902	*E. Oram Lyte, Millersville, Pa..... A 1905
*J. F. Millsbaugh, Winona, Minn..... A 1902	*J. M. Greenwood, Kansas City, Mo..... A 1905
*W. M. Davidson, Topeka, Kan..... C 1902	*Reuben S. Bingham, Tacoma, Wash..... C 1905
E. W. Coy, Cincinnati, O. C 1902	*Joseph Swain, Bloomington, Ind..... C 1905
*O. T. Corson, Columbus, O..... C 1902	*Nathan C. Schaeffer, Harrisburg, Pa. . . C 1905
*James E. Russell, New York, N. Y..... C 1902	*Lewis C. Greenlee, Denver, Colo..... C 1905
*Oliver S. Westcott, Chicago, Ill..... C 1902	*Z. X. Snyder, Greeley, Colo..... C 1905
*W. T. Harris, Washington, D. C..... A 1903	*James A. Foshay, Los Angeles, Cal..... A 1906
*C. B. Gilbert, Rochester, N. Y..... A 1903	*J. H. Phillips, Birmingham, Ala..... A 1906
*William R. Harper, Chicago, Ill. A 1903	Emerson E. White, Columbus, O..... A 1906
*George J. Ramsey, Richmond, Va..... A 1903	*James H. Baker, Boulder, Colo..... A 1906
Charles R. Skinner, Albany, N. Y..... A 1903	Oscar H. Cooper, Waco, Tex..... A 1906
*Charles C. Rounds, New York, N. Y..... C 1903	*Lucia Stickney, Cleveland, O..... C 1906
*L. H. Jones, Cleveland, O..... C 1903	*Irwin Shepard, Winona, Minn. C 1906
*Elmer E. Brown, Berkeley, Cal..... C 1903	*Aaron Gove, Denver, Colo..... C 1906
*W. H. Black, Marshall, Mo..... C 1903	*J. W. Carr, Anderson, Ind..... C 1906
*Nicholas Murray Butler, New York, N. Y. C 1903	*Frank A. Hill, Boston, Mass. C 1906
*Richard G. Boone, Cincinnati, O. A 1904	*James M. Green, Trenton, N. J..... A 1907
*F. Louis Soldan, St. Louis, Mo..... A 1904	*Augustus S. Downing, New York, N. Y.. A 1907
*L. D. Harvey, Madison, Wis..... A 1904	*A. R. Taylor, Decatur, Ill..... A 1907
*L. H. Halsey, Oshkosh, Wis..... A 1904	*Charles D. McIver, Greensboro, N. C.... A 1907
*Carroll G. Pearse, Omaha, Neb..... A 1904	*R. B. Fulton, University, Miss..... A 1907
*Francis W. Parker, Chicago, Ill..... C 1904	George P. Brown, Bloomington, Ill. C 1907
*Mrs. Josephine Heermans, Kans. City, Mo. C 1904	*Bettie A. Dutton, Cleveland, O..... C 1907
*James H. Van Sickle, Baltimore, Md..... C 1904	*Charles H. Keyes, Hartford, Conn..... C 1907
John Dewey, Chicago, Ill..... C 1904	*Edward R. Shaw, New York, N. Y..... C 1907
*N. C. Dougherty, Peoria, Ill..... C 1904	*William F. King, Mt. Vernon, Ia..... C 1907

HONORARY MEMBERS

Earl Barnes, London, England.
 William N. Barringer, Newark, N. J.
 Newton Bateman, Galesburg, Ill.
 D. Bemis, Spokane, Wash.
 Thomas W. Bicknell, Providence, R. I.
 Albert G. Boyden, Bridgewater, Mass.
 Anna C. Brackett, New York, N. Y.
 John E. Bradley, Randolph, Mass.

Edward Brooks, Philadelphia, Pa.
 William L. Bryan, Bloomington, Ind.
 John T. Buchanan, New York, N. Y.
 Matthew H. Buckham, Burlington, Vt.
 David N. Camp, New Britain, Conn.
 James H. Canfield, New York, N. Y.
 Clara Conway, Memphis, Tenn.
 John W. Cook, De Kalb, Ill.

* Present at the Council sessions at Detroit, 1901.

HONORARY MEMBERS—*continued*

William J. Corthell, Gorham, Me.
 J. L. M. Curry, Washington, D. C.
 Charles DeGarmo, Ithaca, N. Y.
 V. C. Dibble, Charleston, S. C.
 John W. Dickinson, Newtonville, Mass.
 Andrew S. Draper, Champaign, Ill.
 John Eaton, Washington, D. C.
 Charles W. Eliot, Cambridge, Mass.
 William W. Folwell, Minneapolis, Minn.
 W. R. Garrett, Nashville, Tenn.
 Daniel C. Gilman, Washington, D. C.
 James C. Greenough, Westfield, Mass.
 W. N. Hailmann, Dayton, O.
 G. Stanley Hall, Worcester, Mass.
 Paul H. Hanus, Cambridge, Mass.
 Walker L. Hervey, New York, N. Y.
 Edwin C. Hewett, Normal, Ill.
 J. George Hodgins, Toronto, Canada.
 Ira G. Hoitt, Sacramento, Cal.
 James H. Hoose, Pasadena, Cal.
 George W. Howison, San Francisco, Cal.
 James L. Hughes, Toronto, Canada.
 Thomas Hunter, New York, N. Y.
 Ellen Hyde, Farmington, Mass.
 E. J. James, Chicago, Ill.
 E. S. Joynes, Columbia, S. C.
 David L. Kiehle, Minneapolis, Minn.
 Thomas Kirkland, Toronto, Canada.
 Henry M. Leipziger, New York, N. Y.
 James MacAlister, Philadelphia, Pa.
 Albert P. Marble, New York, N. Y.
 Francis A. March, Easton, Pa.
 Lillie J. Martin, San Francisco, Cal.
 William H. Maxwell, New York, N. Y.
 Charles A. McMurry, De Kalb, Ill.
 Thomas J. Morgan, Washington, D. C.
 Lemuel Moss, Minneapolis, Minn.
 William A. Mowry, Hyde Park, Mass.

Mary E. Nicholson, Indianapolis, Ind.
 John M. Ordway, New Orleans, La.
 Warren D. Parker, Madison, Wis.
 W. H. Payne, Ann Arbor, Mich.
 Selma H. Peabody, Chicago, Ill.
 John B. Peaslee, Cincinnati, O.
 William F. Phelps, Duluth, Minn.
 Josiah L. Pickard, Brunswick, Me.
 Edward T. Pierce, Los Angeles, Cal.
 William B. Powell, New York, N. Y.
 J. R. Preston, Jackson, Miss.
 John T. Prince, Boston, Mass.
 Frank Rigler, Portland, Ore.
 William H. Ruffner, Lexington, Va.
 Ellen C. Sabin, Milwaukee, Wis.
 Henry Sabin, Des Moines, Ia.
 J. G. Schurman, Ithaca, N. Y.
 H. H. Seerley, Cedar Falls, Ia.
 H. E. Shepard, New York, N. Y.
 Edgar A. Singer, Philadelphia, Pa.
 Euler B. Smith, Athens, Ga.
 Homer B. Sprague, East Orange, N. J.
 J. W. Stearns, Madison, Wis.
 Thomas B. Stockwell, Providence, R. I.
 Grace Bibb Sudborough, Omaha, Neb.
 John Swett, Martinez, Cal.
 H. S. Tarbell, Providence, R. I.
 W. R. Thigpen, Savannah, Ga.
 H. S. Thompson, New York, N. Y.
 L. S. Thompson, Jersey City, N. J.
 Arnold Tompkins, Chicago, Ill.
 Julia S. Tutwiler, Livingstone, Ala.
 Della L. Williams, Delaware, O.
 J. Ormond Wilson, Washington, D. C.
 Lightner Witmer, Philadelphia, Pa.
 H. K. Wolfe, Lincoln, Neb.
 C. M. Woodward, St. Louis, Mo.

DECEASED MEMBERS

Robert Allyn 1894
 Israel W. Andrews 1888
 Joseph Baldwin 1899
 Henry Barnard 1900
 Norman A. Calkins 1895
 Aaron L. Chapin 1892
 N. R. H. Dawson 1895
 Larkin Duntun 1899
 Samuel S. Greene 1883
 John M. Gregory 1898
 George T. Fairchild 1901
 Daniel B. Hagar 1896
 John Hancock 1891
 William D. Henkle 1882
 Elnathan E. Higbee 1889
 Burke A. Hinsdale 1900
 George Howland 1892
 John S. Irwin 1901
 Henry N. James 1901

H. S. Jones 1900
 Merrick Lyon 1888
 James McCosh 1894
 M. A. Newell 1893
 Birdseye G. Northrop 1898
 Edward Olney 1886
 Gustavus J. Orr 1888
 S. S. Parr 1900
 John D. Philbrick 1885
 Matilda S. Cooper Poucher 1900
 Zalmon Richards 1899
 Andrew J. Rickoff 1899
 James A. Smart 1900
 R. W. Stevenson 1893
 Eli T. Tappan 1888
 Charles O. Thompson 1885
 James P. Wickersham 1891
 S. G. Williams 1900

SECRETARY'S MINUTES

FIRST DAY

FIRST SESSION.—MONDAY, JULY 8, 1901, 9 A. M.

The Council met in the Y. M. C. A. Auditorium and was called to order at the appointed hour by President Charles M. Jordan.

After a vocal solo by Miss Cora Cross, United States Commissioner William T. Harris presented a paper on "Isolation in the School—How it Hinders and How it Helps."

Discussion of the paper was opened by Miss Ella F. Young, of Chicago, and continued by Francis W. Parker, F. Louis Soldan, F. A. Fitzpatrick, Aaron Gove, John W. Cook, J. M. Greenwood, and Charles B. Gilbert.

SECOND SESSION.—MONDAY, JULY 8, 2 P. M.

The Council reconvened in the Y. M. C. A. Auditorium.

After a violin solo by Miss Margaret Street, Elmer E. Brown, of California, presented a paper on "Educational Progress During the Past Year."

The president appointed the following Committee on Nominations:

L. H. Jones, of Ohio.

C. B. Gilbert, of New York.

F. A. Fitzpatrick, of Massachusetts.

The Council adjourned at 3:45 P. M., to accept an invitation to a boat ride courteously extended to the members of the Council and officers of the association by the citizens of Detroit.

THIRD SESSION.—MONDAY, JULY 8, 8 P. M.

The Council reconvened in the Y. M. C. A. Auditorium.

After a musical selection by a quartet, President James B. Angell of the University of Michigan delivered an address in memory of the late Dr. B. A. Hinsdale.

The quartet rendered another selection, "Beyond the Smiling and the Weeping."

Addresses in memory of the late Hon. Henry Barnard, LL.D., were then presented as follows:

1. "The Establishment of the Office of United States Commissioner of Education," by United States Commissioner William T. Harris.
2. "Henry Barnard's Influence in the Establishment of Normal Schools," by E. Oram Lyte, of Pennsylvania.
3. "The Influence of Henry Barnard on Schools in the West," by Newton C. Dougherty, of Illinois.
4. "Henry Barnard's Home Life, and His Work and Influence upon Education as Commissioner of Connecticut and Rhode Island," by Charles H. Keyes, of Connecticut.
5. "Henry Barnard as an Educational Critic," by Francis W. Parker, of Illinois.

SECOND DAY.—TUESDAY, JULY 9, 9 A. M.

The Council was called to order by the president at the appointed hour.

After a cornet solo, papers were presented on "Lessons of the Educational Exhibit at Paris," by Miss Anna Tolman Smith, of the United States Bureau of Education, Washington, D. C., and J. Howard Rogers, of New York, director of education and social economy, United States Commission to the Paris Exposition. The papers were discussed by Superintendent Aaron Gove, of Colorado, and Mr. Cloudesley S. H. Brereton, of Melton Constable, England.

The report of the Committee on a National University was then submitted by the chairman, President W. R. Harper of the University of Chicago. The report was discussed by President James H. Baker of the University of Colorado, ex-Governor John W. Hoyt, of Washington, D. C., and Dr. Nicholas Murray Butler, of New York.

President Swain of the University of Indiana offered the following resolution and moved its adoption. Seconded :

Resolved :

1. That the report of the committee be received and the committee discharged.

2. That the National Council of Education hereby reaffirms the declarations of the National Educational Association in favor of the establishment of a national university.

Dr. Angell, being called upon, stated that he had attended one meeting of the committee. He gave as a reason for not signing the committee's report that in his opinion the George Washington Memorial Association did not afford a sufficient basis for working out so important an undertaking as that upon which the committee had been appointed to report.

Dr. Cyrus Northrup, trustee of the Washington Memorial Association, favored accepting the committee's report, not as presenting the best possible plan, but as presenting a plan that would not in any way interfere with establishing a national university. If he could not get the ideal thing at once, he favored accepting the next best thing rather than standing still and refusing everything except in a certain form.

Mr. Keyes favored Mr. Swain's motion, saying that it saves us from expressing opposition to a national university, and leaves us free to take whatever measures may commend themselves to us in the future.

Mr. Pearce, of Omaha, thought that the Council is not ready to take a position adverse to a national university, and he therefore favored the resolution offered by Mr. Swain.

The motion, being put to vote, was adopted, twenty-two to four.

THIRD DAY.—THURSDAY, JULY 11, 2:30 P. M.

The Council met at the Y. M. C. A. Auditorium, and enjoyed a vocal solo by Mrs. Jennie Standart.

Dr. G. Stanley Hall, of Clark University, then presented a paper on "The Ideal School." The paper was discussed by Messrs. Aaron Gove, of Colorado; J. M. Greenwood, of Missouri; Francis W. Parker, of Illinois; J. W. Cook, of Illinois; and Miss Stickney, of Ohio.

J. M. Greenwood, of Missouri, chairman of the special Committee on Investigations and Appropriations, submitted a communication from the Board of Directors regarding the appropriation of \$200 to defray the expenses of a committee to collect information concerning the progress, means, and results of consolidating rural schools. The communication was referred to the special Committee on Appropriations.

FOURTH DAY.—FRIDAY, JULY 12, 2:30 P. M.

The Council convened at the Y. M. C. A. Auditorium, and was opened by a vocal solo by Miss Esther St. John.

A communication from the secretary of the American Medical Temperance Association was then submitted by the president, which, on motion, was received and ordered filed.

The report of the special Committee on High-School Statistics was then read by the chairman, J. M. Greenwood, of Missouri. A motion was made by L. H. Jones, of Ohio, that the report be accepted and the committee continued, to report next year. After some discussion by Messrs. Jones, Gove, Greenwood, and Brown, the motion prevailed.

Chairman Greenwood of the special Committee on Appropriations then presented the following resolutions, submitted by the Board of Directors for advisory action:

Resolved, That the sum of \$300, or so much thereof as may be necessary, be, and hereby is, appropriated to defray the necessary clerical expenses of the committee named by a round table of the Department of Superintendence to collect information regarding the progress, means, and results of consolidating rural schools; provided that all bills against this appropriation shall be certified as correct by the chairman of the committee aforesaid.

J. M. GREENWOOD, *Chairman*.
NICHOLAS MURRAY BUTLER.
AUGUSTUS L. DOWNING.
L. D. HARVEY.

The following substitute, presented by Dr. Nicholas Murray Butler, of New York, was adopted :

Resolved, That the Council expresses its sympathy with, and approval of, the movement for the consolidation of rural school districts and the transportation of children to central schools.

The report of the Committee on Prize Essays on School Hygiene was then submitted by its chairman, A. R. Taylor, as follows :

To the Members of the National Council of Education:

At the Chattanooga meeting of the Department of Superintendence a Committee on School Hygiene was appointed. That committee, thru its chairman, W. T. Harris, made a brief report at the meeting of that department at Columbus, in February, 1899. By request, the report was also read before the Council at the meeting at Los Angeles, in June of the same year. It proposed the offering of prizes for essays on heating, lighting, seating, and ventilation. The recommendations of the committee were approved, and the Board of Directors of the general association appropriated \$1,200 for prizes. Four first prizes of \$300 each, and four second prizes of \$100 each, on the subjects designated, were authorized.

The conduct of this competitive contest was intrusted to a committee of five, consisting of W. T. Harris, W. T. King, Aaron Gove, George P. Brown, and A. R. Taylor. This committee adopted suitable regulations for the competition and issued several thousand copies of a circular, which were mailed to superintendents, principals, school-supply houses, health boards, sanitary experts, educational and scientific journals, and to the general press.

Dr. Mowry, of Hyde Park, Mass.; Principal W. E. Wilson, of Ellensburg, Washington; and Principal John R. Kirk, of Kirksville, Mo., were appointed to pass upon the merits of the essays submitted.

The result shows that little interest was awakened, for scarcely a dozen essays, few of those being of any merit, were submitted. The regulations of the competition reserved the right of the committee to reject all manuscripts, if they were found to be inferior. The judges were unanimous in reporting that in their estimation no essay submitted is worthy the award of a first prize and of publication by the association.

Your committee regrets this outcome of its efforts to secure the desired essays. We are pleased, however, to note the appearance of several meritorious books on the general subject of school hygiene, and indulge the hope that the emphasis now given to the need for an authoritative and scientific treatment of the various problems involved may soon result in a treatise meeting the ideals set forth in the report to the Department of Superintendence.

JULY 12, 1901.

Respectfully submitted,

A. R. TAYLOR, *Chairman*.
W. F. KING.
W. T. HARRIS.
AARON GOVE.

The Committee on Nominations, thru its chairman, L. H. Jones, submitted the following report :

To the National Council of Education:

Your Committee on Nomination of Officers has the honor to make the following recommendations:

For *President*—J. H. Phillips, of Alabama.

For *Vice-President*—Miss Mary E. Nicholson, of Indiana.

For *Secretary*—J. F. Millsapugh, of Minnesota.

For *Member of Executive Committee*—Superintendent R. G. Boone, of Ohio.

For *Members of Committee on Membership*—Superintendent J. H. Van Sickle, of Maryland; Superintendent L. D. Harvey, of Wisconsin.

(Signed) L. H. JONES.
CHAS. B. GILBERT.
FRANK A. FITZPATRICK.

Report of the Committee on Membership :

To the National Council:

Your committee respectfully submits the following nominations:

George P. Brown, Bloomington, Ill., to succeed himself.

Charles H. Keyes, Hartford, Conn., to succeed himself.

William F. King, Mt. Vernon, Ia., to succeed himself.

Bettie A. Dutton, Cleveland, O., to succeed herself.

All of the above for the full term, six years.

Edward R. Shaw, of New York, to succeed William B. Powell, full term.

John Dewey, Chicago, Ill., to succeed the late B. A. Hinsdale, term to expire 1904.

Z. X. Snyder, of Greeley, Colo., to succeed Edward T. Pierce, term to expire 1905.

C. H. KEYES.

J. M. GREENWOOD.

J. H. VAN SICKLE.

W. T. HARRIS.

After a roll-call of the Council, which disclosed the fact that forty-nine members had been present at its sessions, the president announced adjournment *sine die*.

J. H. PHILLIPS, *Secretary*.

PAPERS AND DISCUSSIONS

ISOLATION IN THE SCHOOL—HOW IT HINDERS AND HOW IT HELPS

W. T. HARRIS, UNITED STATES COMMISSIONER OF EDUCATION

One of the earliest points at which educational reform begins to attack whatever it finds to be established as the order of school education for its day is the isolation of the work of instruction and discipline from the home life of the child.

There is a separation more or less abrupt between the occupations within the home and those in the school. There is a contrast in manner of behavior; the school expects a degree of self-restraint on the part of the child, a considerate attention to the demands of the task before him, not only as to its demands upon him, but also as to those on his fellow-pupils and on his teachers.

He leaves behind him in the home a certain spontaneity of action and becomes self-repressive and sometimes painfully conscious of all his little impulses and tendencies. He must inhibit such action as will interfere with the grand purpose of the school.

In his six years of life he has already accumulated a stock of interests that relate to the members of his family and the possessions of his household. He has supplemented this by experience in his neighborhood and discovered very much that goes to supply wants or needs in the stock of interests in his own home.

At the age of six he enters the school and commences to study letters and numbers as his chief business.

The school seems bent on changing him from an ear-minded person to an eye-minded person—from one to whom language consists only of spoken words heard by the ear, to one for whom language consists of printed or written words, or of characters such as the Arabic notation furnishes. All his home and neighborhood interests are set aside in the

schoolroom, or at least subordinated to new disciplines of a comparatively abstract character. For reading and writing deal with arbitrary characters conventionally used to represent, not words, but sounds. The child knows words by ear, but he has no theory of elementary sounds; they are not observed by him, because he does not get so far as to analyze his words. Letters, printed or written, and also the sounds that they represent, are alike strange objects to the child. But eye-mindedness will mean to the child the possibility of holding the word with such a firm grip that he can think more precisely than he can with words known orally, but not visually. It will mean that he can get beyond his merely colloquial vocabulary of a few hundred words of a loose and uncertain meaning, and master new vocabularies invented by poets to express all the shades of feeling and character that human nature is capable of, and other new vocabularies invented by specialists in science to collect and combine all the facts that man knows about nature and man.

Civilization depends on the written and printed word. It has long appeared to be a necessity of society that the child should go to school, just for the sake of becoming eye-minded. But the work of the school is very different from the occupation of the child in the family in his first six years. It is isolated from the home life, and only refers to it incidentally for illustrations and examples; for applications and rudimentary experiences that help to understand the lesson of the day.

Whenever a topic comes up in school that relates in any way to the child's experience, the good teacher always appeals to this body of original observation as a sort of apperception fund—a fund of direct information which helps explain the subject presented in the school lesson.

So, too, the kindergarten has been invented, and a series of games and occupations offered to younger children as a method to connect more closely the school and the home. But the child does not find the home life continued in the kindergarten—not the home life of caprice and wild play. He has come into a social whole, and he must conform to the regulations necessary for the existence of a social whole. He must play the game chosen by the teacher and work at the occupation set for his class. Everything is prescribed for him. His occupations are not such as he has seen at home. They deal with elements that enter certain processes of manufacture, that exist in his neighborhood, but they are almost as abstract as the letters used to spell words.

This fact has been well observed by educational reformers, and pedagogy has received the fruits of their labors to improve its methods.

The isolation of the school from the home life is made less by turns of skill in methods of instruction, or in methods of discipline; by inventions of a long series of short steps and easy gradients that place it within the power of the child to climb to difficult heights.

Were the child taken from the home entirely and kept in the school-room constantly, it would pretty effectually quench what the child had acquired of individuality in home life.

This has been a great evil in a certain class of boarding schools and in orphan asylums.

But, as a fact, the ordinary primary school takes only five hours of the day, five days of the week, and forty weeks of the year. This gives one-ninth of the entire time to the schoolroom. If the child consumes four-ninths of the time in sleep and four-ninths of the time in continuing his home and neighborhood life, he will have, in the average case, sufficient elasticity to react against the cramp which is threatened by school life.

The concentration of mind on the part of the professional teacher to invent means to lessen the step from home life to school life has tended to make him lose sight of the educative value of what is peculiar to the school itself. The school is sometimes regarded as a sort of necessary evil, which it would be well to eliminate entirely from society, if a suitable substitute could be found. Sometimes, too, it comes to seem as if the home life of the child contained all that is truly desirable. The one who holds this point of view is prone to fall into the same error in regard to the state. He will think that the family should be all in all, and that the state—that is to say, the political life of the people—should be dispensed with, and thereby an enormous saving effected in the life of man.

Something of this trend of thought in modern pedagogy is found prevailing in the thought of Europe in the last century. It was put into application on a grand scale in France. It was a sort of object-lesson for all that part of mankind that read and think. The French Revolution had been for fifteen years a spectacle to all Europe of a people trying to clear up its mind with regard to the relation between the individual and the state. In the Reign of Terror all Europe made the discovery that with mere individualism each person of necessity comes to suspect every other person. In such a condition society becomes a mob, and the individual finds no safety from suspicion and violence. The reaction in France from the time of the Reign of Terror led farther and farther away from mere individualism, and not only from this, but from any mere life of nature. There came to be an insight into the necessity of the government, the institution of the state, as the guarantee of the life and liberty of the citizen. This insight came with more force to the thinkers living in other countries, and especially in Germany, than it did even to the people in France. In Germany it began to be seen that not only the state, but other institutions, such as the church and the community of productive industry and the family, are institutions which are needed to make possible the life and liberty of the citizen.

The ideal nature of man gets realized in his institutions. The family is an organization which protects the individual in his immature years of

infancy, in his old age of decrepitude, and, in other words, equalizes the difference of sex, age and condition of health, etc. Civil society is organized so that by division of labor each worker becomes skillful and can accomplish a maximum of production, and yet each person depends upon others in his community, and, in fact, upon all the race, for the variety of articles which he needs to supply his wants. By commerce this dependence is converted into independence. Each citizen is made independent of want by belonging to a social whole. The state, on the other hand, protects the weak against the strong, and secures justice, not by the individual, which would be private revenge, but by the state. The state is the reality of the rational self, which is only partially realized in each individual. Again, the church devotes itself to the preservation of the wisdom of the past. It teaches a view of the world as one in a rational purpose; it offers a summary of this wisdom to all the people, whether mature or immature; it applies this wisdom more or less perfectly or imperfectly to the practical issues of the day in the life of each individual.

The relation of the individual to this larger self incarnated in institutions is that of obedience to authority. The institution, which is a social whole in one of its forms, prescribes to the individual, and he obeys. In all lower and lowest conditions of civilization the punishment of death is most frequently awarded to the individual who deliberately disobeys this authority, vested by institutions in responsible officers, or chiefs; in the family, in civil society, in the state, in the church.

With the phenomena of the French Revolution before them, European thinkers saw how this element of authority comes by and by to be questioned by an educated or enlightened people. Mere authority seems to be alien to the rational will of the individual. Hence, one school of thinkers came to call this rational world, embodied in institutions, the world of self-estrangement (*Selbstentfremdung*). The individual who becomes intensely conscious of his personality, in the beginnings of a scientific education, comes to attack all authority as a foreign or alien affair. He does not see that it embodies the realization of his greater self. He does not see that to obey institutions is to obey his rational self. To him it is a matter of blind obedience to what is irrational.

Mind, as it appears in infancy and childhood, is the potentiality of man, but not the reality of man. In order to become man in his maturity, the immature child must estrange itself—become foreign to what it finds itself to be as child or infant—and it must study the grounds of the commands of authority until it gets an insight into their rationality. Then it returns out of its estrangement and becomes at home in the forms of reason that have been realized in the long course of the history of the human race. The child or infant has no longer the intense delight in his immediate environment, but he delights in finding

again and again a new province of rationality at first strange or foreign to him, and mastering it so that he becomes at home in it and becomes able to add its strength to his strength.

Man thus goes from a state of weakness and feebleness, and of consequent subordination to his environment, over to the condition of mastering his environment, conquering nature, and making it his instrument of self-estrangement. He eats his daily bread and meat and assimilates or digests it as a foreign material, making it over into a tissue of his own body. Thus, too, he takes the wisdom of the race, both its forms of doing and its forms of thinking, its scientific and spiritual insights, and, so to speak, digests or assimilates them by seeing their rationality and learning how to do or act in right forms, and understand those forms. All the while the little individual is growing in might by this process of assimilation. He is reinforcing his little will-power by the will-power of the race; he is reinforcing his feeble intellect by the aggregate intellect of man as a social whole.

Quite frequently the philosophy of education has followed this way of looking on the institutional world as a world of self-estrangement, and the individual infant or savage is regarded as the point of departure, as an already complete world of reason, and the institutions are regarded as something less real and substantial than the various parts of education—namely, that of the family—in the etiquette that makes possible the life of the individual in the family or home; the conformity to the law of the state, which makes the individual into a citizen, and the spiritual purification and holiness that come from obedience to the church, all these kinds of obedience are looked upon as something alien, as something isolated from the substantial and real life of the individual. According to this there is an isolation in the school, in the education of the state and the church and the family, and in the training for one's vocation; these are all species of isolation. But it is better to turn this view around and look upon the individual himself, when an infant or savage, as isolated from his true rational being.

One could say that all education, whether in the school, the family, the state, the church, or civil society, is an attempt to overcome the isolation of the undeveloped individual, the immature specimen of the human race, i. e., the infant or the savage, for the child or the savage is isolated from the rationality of his true being. His thought is feeble, because he cannot reinforce it by the thought of the race. His action is feeble, because it is not reinforced by the action of all mankind. Education strives to emancipate the individual child from his isolation. It is the child and not the school that is self-estranged. In the school the child recovers his true self.

But self-estrangement as a principle helps one understand many things in education that are otherwise enigmatic; for example, how

the culture of all races proceeds by a mastery of a classic literature : the study of Confucius and Mencius in Chinese education ; the study of the code of Manu, the Vedas, the Hitopadesa, among the East Indians ; the study of the Koran among the Mahommedans ; and the study of the Bible and of Greek and Latin classics among modern Christian nations. It is a sort of vicarious living over again of the far-off world — far off from the present, and offering an earlier epoch of the nation's civilization.

The child cradled in his immediate present takes it for all in all and for an isolated complete whole, but his education teaches him that it is not independent, but that it is in causal relation with all its past, and in a causal reaction with all that exists, however distant from it in space. Finding himself mistaken as to the completeness of his present life in this isolation, the youth begins to take his steps with increasing wonder and delight at finding new worlds that were before invisible to him, but which, when once seen, help explain to him what is here and now. Every intellectual nation in the world, whether one begins with the Persian or East Indian, the Egyptian, or the Greeks and Romans, has studied not only its own classics, but also such elements as it possessed of abstract science—like mathematics and astronomy—and has undertaken foreign travel as an element of education. At home the school has symbolized its isolation, or its difference from the everyday life of the immediate present, by the adoption of certain formal usages ; the wearing of some special garb to distinguish the order from the rest of the community ; the adoption of some mode of life different from that of the family of the average citizen. The student, perhaps, has been aided in, rather than hindered from, mastering the strange and far-off phases of the life of his people by these matters of immediate garb, and the community life in the school or college. He takes some pride in thus celebrating his arrival at a step removed from the commonplace life which he lived as an immature youth. In the school, where he expects to be enlarged in his life by the addition of the will and intellect of the race, he takes some pleasure in making this distinction of his new life from his old life visible by a cap and gown, and by a college life in a system of barracks (college dormitories), rather than in the family life adopted by his civilization.

All culture begins with this first estrangement of the immature individual toward his immediate surroundings, material and spiritual, and with the effort to make himself at home in what is at first strange and different, but which he will soon render familiar by study and practice.

He will begin to see, step by step, his own rationality as realized in civilization, and identify it with the purpose of the life of his race. He will make over for himself a second nature in these other stages of rational life, isolated by time and space from him.

He will increase proportionally in his ability to think and to do. He

will not be surprised at the discovery of a first difference from the manners and customs of his family or neighborhood. He will not be astonished at the habits of doing and thinking which he sees among foreigners, but will explain them in the light which he has obtained from the comparative study of manners and customs and modes of doing things. He will be able to criticise his own manners and customs and methods of doing, and will see how to reform them in such a manner as to bring about a better conformity with what is rational.

It is in connection with this process of self-estrangement that a series of phenomena arises which take on the character of reaction against the ordinances of the institutions of culture—the phenomena of student life. It is marked in the entire history of the race that the culture world, the world of self-estrangement, as organized in the school, the church, the state, and especially in the family, always assumes the attitude of authority and demands implicit obedience on the part of the child or the individual citizen. This obedience—more in ancient times than now—has been insisted upon to such an extent as to threaten to produce the effacement of the individual. It was thought that the individual must be effaced before he could become a participator in the intellect and will of the social whole.

It sounds paradoxical to say that the pupil must be effaced before he can be reinforced. All the improvements and reforms in pedagogy from the beginning have made it a point of effort to correct this defect and prevent the complete effacement of the pupil; for the more one can save of the strength of the pupil in will and intellect, the better, provided it is turned in the direction of conformity to the will and intellect of the social whole. Insight, as we have before stated, emancipates the person from authority. When insight is obtained, there is no longer any blind authority, for the person does his deed freely and intentionally through insight into its rationality. He does not do it to oblige some other person merely, but because he sees that it is in itself reasonable.

Isolation of the school thus seems to mean something deeper than the mere lack of continuity with the home life, or even with the life of civil society in which the home life moves. It means the emancipation of the youth from the immediate sway of what is near and the bringing of his mind into an appreciation of what is far off in time and space, but which nevertheless has been powerful in making the present world what it is.

It is a process of correcting the judgment of the individual as to what his true self is, and as to what is of permanent value in human endeavor.

DISCUSSION

MRS. ELLA F. YOUNG, University of Chicago.—It is very difficult for me to oppose anything said by Dr. Harris; I owe so much to him. His generous encouragement in the past has been to me a source of continued inspiration. Doubtless many of you have

enjoyed similar experiences in your acquaintance with him. He has, however, asked me to discuss his paper, and he knows that there is a difference of opinion between us on this subject.

The word "isolation," as used in the paper just read, has not its customary significance. In the translation of Rosenkranz's *Philosophy of Education*, edited by Dr. Harris, the term "self-estrangement" is not used as synonymous with "isolation." I am not going to raise any opposition to "self-estrangement and its removal" as presented in that book. But when the essayist treats the two, "estrangement" and "isolation," as identical, he is plunging us into a war of words, because we are using the word "isolation" from different standpoints, or with different meanings. Self-estrangement is simply a stage in development of mind. The next stage in the process of culture, however, is the overcoming of the estrangement.

Isolation is a different thing. The child, the teacher, *is put* or *puts himself* into a place to do a prescribed thing, in the doing of which he is not co-operative; that is, a certain result is demanded of the isolated worker who does not have determining power in originating the method of the work. To indicate just what product a teacher or a learner is to aim to secure is to dictate the method of the individual. There is no greater bit of nonsense afloat than that which says: "I leave the teacher free. It is results only for which I ask." That means the teacher may work as she prefers in trying to duplicate the result which my mind has constructed. Carry this into the school, and there ensues that *pedagogical cramp* which the essayist described as resulting from the continual bracing of the teacher against the child's tendency to break away from the aim of the school work. Now, here you have the effect of isolation of the determination of the end for which the child works, from his own mental activity.

Great stress was laid by the speaker on the desirability of differentiating the method of the school from that of the home. I can't see the necessity for such a differentiation. In that very change lies the answer to that oft-repeated question: Why does a child learn so much by himself in the first six years of his life and so little, comparatively, in the school in the second six years? If the method of the first period, the working on material to obtain the answer which the child has raised, were adopted in the school, teachers would not suffer from pedagogical cramp. If this method should obtain thruout the school, neither the children nor the teachers would be isolated, as too frequently they are, from that self-activity which Dr. Harris in his writings urges as the essential of life, and yet which, in the mere hearing of the paper, I miss.

AARON GOVE, Denver, Colo.—Some of us who are present, superintendents of larger and smaller cities, I am sure will be gratified if the discussion can take a more practical form. We are fond of the poets and philosophers, but some of us, who are neither poets nor philosophers, are placed in the practical part of the work and confronted with obstacles, the removal of which is necessary. I am one of a large number of superintendents who have been made to realize within the last few years that the preparation of grammar-school pupils for the high school has not been as well done as formerly. Principals of the high schools complain that pupils come to them fairly well versed in general knowledge, but lacking in accuracy in the essentials demanded for intelligent work in the first year of the high school. This, we believe, has come about by the mellow training which they have received in the grammar school as contrasted with the more severe discipline of previous years. If this be true, generally, a halt must be called either in the number of subjects involved in the preparatory course or in the character of the training. It is helpful for the young person to know whether the horse lies down first in front or behind; whether the maple grows faster than the poplar; why mules and not horses are shipped to South Africa for military purposes; but it is far more important, and quite necessary, that the same young person shall be able to compute an arithmetical problem accurately, and be so well skilled in the elementary branches as to enable him to pursue intelligently the studies of the high-school course.

Mrs. YOUNG.—I broke off suddenly, a few moments ago, in discussing this paper, because my remarks were taking on a practical nature, and it was evident that the essayist wished a discussion of only the theoretical phase of the question. The two phases are so intimate that it is almost impossible for me to treat one and neglect the other.

As regards the work in the secondary schools at the present time, I believe it to be far in advance of that of twenty years back. While it is true that the schools of the most modern type are weak in developing in the pupils the idea of rounding out their knowledge of that which they seek, yet there is the gain that the boys and girls are approaching science and history from their own past; are not looking at those subjects as if they dealt with something far above and away from the world in which the learners live.

The home, the past, of the pupils must be recognized in the school, otherwise pedagogical cramp and isolation will continue to play havoc in our work.

CHARLES B. GILBERT, Rochester, N. Y.—There is here clearly stated a vital issue. Between the two views is a great gulf fixed. The question is wholly of initiative. Is the work of the school to be predetermined in accordance with principles wholly apart from the child, or is it to be continually determined in accordance with the demands of his growing spirit? Is education—in other words, growth—a force acting from within out thru the child's self-activity, or is it something to be put on like a coat, and that regardless of fit? Are the child's previous growth and attainment to be ignored, or are his apperceiving masses to be made use of in determining the subject-matter and method of his education? I for one desire to be put on record as believing that education is growth and not a plaster.

Dr. Harris, in his paper, if I correctly heard it, spoke of the necessary effacement of the child before he can come into his heritage. How does that differ from the old belief in the necessity of breaking the will or the theological dogma of total depravity—both dreadful?

The child's entrance into the heritage of civilization and history is not cataclysmic; it is the gradual and gentle movement characteristic of growth. The difference between the two is as wide as the world.

JOHN W. COOK, president State Normal School, De Kalb, Ill.—I understand it to be the wish of the president of the department that the discussion of this remarkable paper should assume the character of a round table. I trust that its distinguished author will correct me if I indicate by what I shall attempt to say that I do not understand its purport.

The term "isolation" is new to me in this connection. I assume that it is substantially synonymous with our old friend "estrangement," which Dr. Rosenkranz has made familiar to students of the philosophy of education. I assume, further, that Dr. Harris, as is his usual custom, is seeking a fundamental category upon which our thinking may ground itself in dealing with the problem of education.

I am not surprised at the antagonisms which his discussion of his theme has aroused. Such words as "constraint," "self-restraint," "self-repression," "effacement of individuality," and others of their kind are the especial horror of a certain school of—not educational thinkers exactly, for that term does not describe their most characteristic quality—educational leaders who are looking at the problem from the side of method rather than from the standpoint of the philosopher who is seeking the fundamental principle. These men and women live in the schoolroom. They are in the constant companionship of childhood. They have witnessed the blight and mildew that are the inevitable consequence of the wretched methods that have characterized the schools of the past. We all know how Rousseau cried out against the enormities of the word-worshippers, and how the tender soul of Pestalozzi was stirred by the senseless formalism of his time. I sympathize deeply with the solicitude of these ladies and gentlemen lest the children should be deprived of their birthright of joy and freedom by the *discipline* of the school. But it surely will be clear to these good soldiers in the great cause of educational liberty, if they

will dismiss their fears for a moment, that this is not a discussion of method, but of what is true of the educative process. With this fact in mind, I am unable to see how issue can be maintained with any proposition that Dr. Harris has uttered.

Pray, what is it to become educated, if it is not to find one's self at home in regions that were before foreign, and consequently unknown? Is the child to live forever with the inanities of the nursery? What is the binominal theorem to the darlings of the kindergarten, in their little world a mile square? Yet the time will come when superb formulæ will be as simple as a nurse's tale. How? By successive invasions of strange realms, strange as a Greek letter to a three-year-old Polynesian, until they have lost their strangeness because they have revealed to the explorer their kinship to his larger self. And when the soul is no longer confronted by an alien world and challenged to press itself against its mysteries, that soul has reached the vanishing point of education.

And is this to be achieved without constraint or self-repression or submission to the authority of the next year's self? Is there to be no "effacement" of a small individuality in the interests of a large individuality? "Individuality" is a ticklish word to deal with in a "free" country. Was Huxley wrong when he asserted that "the only freedom that I care about is the freedom to do right; the freedom to do wrong I am willing to part with on the cheapest terms to anyone who will take it of me." Is inhibition really to be banished from the educational terminology in the interests of the spontaneity of the child? Of course, when we are sane and not engaged in controversial discourse, we are not going to urge such absurdities, for when inhibition goes we know that a large slice of attention will go along with it. No, gentlemen; I much mistake if every dissenter on this floor today will not be in substantial agreement with the main contention of Dr. Harris when the opportunity for a careful study of what seems to me to be his most delightful and revealing contribution to this aspect of educational thought shall be afforded by the publication of his address.

EDUCATIONAL PROGRESS OF THE YEAR

ELMER E. BROWN, PROFESSOR OF THEORY AND PRACTICE OF EDUCATION,
UNIVERSITY OF CALIFORNIA, BERKELEY, CAL.

One year ago the annual report on educational progress was presented to this Council by Professor Hinsdale, of the University of Michigan. I cannot enter upon the similar task to which I have been assigned without first calling up the memory of that great teacher, who in the interim has been called from this earthly life.

Burke Aaron Hinsdale was one of the most useful and distinguished members of this Council, of which he was president in 1897. His scholarship was notably broad and accurate; his judgment was sane and sure. In the meetings of the National Council and Association we have had many opportunities of seeing how illuminating and conclusive he could be in public debate. His logic was seasoned with genial humor; there was about him a very human apprehension of actualities; he was never a doctrinaire. Some of his strongest work was done in the field of history, and particularly in the history of American education. The last time I saw him he told me, with an almost boyish appearance of diffidence, that he had ventured to think of writing a general history of

education in the United States. We have great reason to regret that this project could not have been carried out.

As a member of some of his earliest classes in the University of Michigan, I desire to bear personal testimony to the helpful suggestiveness of his instruction, particularly in his seminary work in educational history. Doubtless many of those here present could tell of intellectual uplift and stimulus received in his class-room. And many more might speak of his personal kindness. His massive frame was well matched by his broad sympathy and large-heartedness, and his interest in the homely necessary things of life.

"O mayster dere and fadir reverent—

Alas that thou thine excellent prudence

In thy bed mortel mighteste not bequethe!"

It is well that in considering our educational progress we should not forget those who have fallen by the way. Henry Barnard is gone—full of years and of honor; Thomas Davidson, that knightly spirit, pre-eminent in learning, has been taken, in the very strength of his years; only yesterday came the news that the venerable and honored Joseph Le Conte has passed away in the Yosemite Valley which he so greatly loved; and others, worthy of such goodly company, have passed with them. These men have deserved remembrance of their country and of their brethren. Our forward step is surer that they have lived and wrought with us.

Now, in making a survey of the year's educational progress, we must try to avoid bewilderment among particulars. We are too near to the facts considered to get any true historical perspective; but already we can see that they are bound up with the general progress of our civilization.

Aside from all things educational, this has been a year of mighty movements. Much has been said about "expansion." In more ways than one, expansion has been the striking characteristic of the past twelvemonth.

Five years ago Mr. McKinley was elected president for the first time, after a campaign which had turned largely on economic questions. Bimetallism had been thrust forward as the best available embodiment of a rising social unrest. But the new presidential term was only well begun when a question of foreign policy overshadowed all things else. The war with Spain was fought, and its success brought forward great international problems, such as our people had not faced before. The congress at The Hague set us thinking of the world-peace and our part in maintaining it for the future; but we now found ourselves thinking what it meant to be a world-power, and what we should do as a world-power in the immediate present. The terrible business in China set us thinking fast and hard. We were already a world-power in the thick of the world's affairs. Mr. McKinley was elected for the second time, and the campaign which he won this time was fought mainly on questions

growing out of our new foreign relations. The policy of expansion was approved by the voters; and it has now received judicial confirmation in one of the most important decisions ever rendered by the Supreme Court of the United States. It has been determined that the United States not only possesses the power inherent in all true nations to expand in whatever way she can and will, but that this power may be exercised under the old constitution handed down to us by the fathers.

In the meantime the industrial distresses which found such half-articulate expression in the campaign of 1896 have been only temporarily obscured. They, too, are growing pains. Before long they must be acutely felt again. For industrial expansion is going along with political expansion, and within the past few months it has advanced at an astonishing rate. Railway combinations, more or less completely accomplished, for the control of lines belting the land from coast to coast, with a pendant of ocean steamers at either end; industrial combinations, steadily increasing in magnitude; and now the United States Steel Corporation, overtopping all the rest, with a capital stock of over \$1,100,000,000 and a bonded indebtedness of over \$300,000,000—are all in evidence. It is not the mere amount of money involved in these transactions that challenges the imagination, but the tremendous combination of forces and organizations brought into working unity. All of these movements, political and industrial, have kept men straining hard to think thoughts large enough to meet the new situations presented.

Other movements have taken place, under the influence of such industrial and international readjustments, and some of these have been of very great significance. One of them may be mentioned more particularly. I refer to the rise of a new South. The division of 1861 lasted in some sense till 1898, when the nation, without regard to sections, went into the war with Spain. Northern Republicans had stood in an attitude of tutelage toward the South; southern Democrats in an attitude of protest toward the North. Now the southern states are simply proceeding to work out their own problems in their own way, as northern and western states have done. Some of the results may be bad in the South, as they have been in the North and in the West; but the ultimate outcome will surely be for good.

Enough has now been said to remind us that the past year has been marked by far-reaching changes in our national life; and that these changes are the accompaniment of accelerated growth, of increasing complexity of internal and external relations.

In such a *milieu* American civilization has been making its way onward during the year just past. Religion, philosophy, science, art, literature, polite society, medicine, jurisprudence, engineering, invention—all the great capital interests of human life have felt the tremendous stir that is still going on. Such a time of sudden enlargement has in it

much of good and much of evil, sorrow and joy all mixed together. But it is mightily exhilarating to live in such a time, and to do even the smallest thing toward making the better part overbalance the worse.

With such accompaniments education has been making its way. The opinion of mankind has continued to give it an honorable place. Education has been seeking to keep itself in working adjustment with the expanding life of other human concerns. It has endeavored to discharge a growing responsibility for making the better part triumph over the worse. The most of the year's happenings and movements, which we have to record, will be found in some sort of connection with this progressive adjustment to new conditions.

One further fact should be noted here, the fact that, in the social expansion of our time, educational interests are expanding, not only actually, but also relatively. It is evident that social progress is becoming more and more largely dependent upon educational progress. The responsibility resting upon our educational institutions is already beyond any parallel in the history of the world, and what it is to be we cannot at all foresee.

Now, let us consider a little more particularly the kind of educational progress that the past year has seen. The development and consolidation of American industries have been accompanied, not only by enormous accumulations of wealth, but also by enormous gifts on the part of the accumulators of wealth; and these gifts have taken more generally the direction of contributions to educational institutions than any other. It appears from such statistics as are now at hand that the gifts to educational institutions for the year 1900 amounted in the aggregate to not far from \$23,000,000; and the gifts to libraries not directly connected with schools, to about \$3,000,000 more. These statistics relate to gifts of not less than \$5,000 each, which were made, became operative, or were completed during the year 1900, and do not include the ordinary contributions of churches and other denominational organizations, nor public appropriations, local, state, or national.

Mr. Carnegie, of course, has been one of the largest contributors to this enormous sum. Mr. Rockefeller, who has been similarly distinguished, both as an accumulator and as a giver, recently proposed, at the convocation of the University of Chicago, that cheers be given for Mr. Carnegie, whom he described as one "who has given away more money than any other living man." In fact, Mr. Carnegie's recent career is profoundly interesting. He had doubtless done more than any other one man to bring the steel industry of this country up to the point where the next step was the formation of the United States Steel Corporation. He had proved himself one of the most successful accumulators that this country has ever seen. At this point in his career, in accordance with a well-considered theory of life, Mr. Carnegie brought his operations as an

accumulator to an end and entered upon the very different occupation of a distributor. It takes a high degree of versatility to achieve equal success in these two very different parts. But Mr. Carnegie has made a very promising beginning in his new rôle. He has made a gift of \$5,000,000 to be used for the benefit of the employés of the companies with which he was connected in Pittsburg and its vicinity. The income of a large part of this sum is to be used for the maintenance of a system of pensions to employés, but another large part is to be devoted to the maintenance of libraries and other purposes essentially educational. It is well known that Mr. Carnegie has made numerous gifts for the erection of library buildings in various cities of this country. How many such buildings he has erected it would be difficult to say. His most magnificent performance in this line is the proposal to establish sixty-five branch libraries in different portions of New York city, at an estimated cost of \$5,200,000. As in the most of such instances, this gift is conditioned upon action by the community which receives the benefit. New York is called upon to provide sites upon which these branch libraries may be built. There can be little doubt that the sites will be provided and the buildings secured in due time. The latest news of this sort is that this beautiful and hospitable city of Detroit has been similarly honored.

Up to April 1 it was estimated that Mr. Carnegie's gifts had reached the sum of \$30,000,000. Since that time he has been in Europe, where his visit has been signalized by the gift of \$10,000,000 for the promotion of university education in Scotland. It is understood that the income of a portion of this fund is to be used in defraying the expenses of capable and needy students in the four Scotch universities. Another considerable proportion is to be devoted to the development of university instruction, especial stress being laid upon scientific, economic, and historical studies. Provision seems to have been made for the especial encouragement of graduate students and advanced research. So far as we can judge from the accounts that have come to us, Mr. Carnegie has provided for the effective administration of this gift, and has not limited the administrators unduly as to the objects to which the funds may be applied.

The recent commencement season has called forth the announcement of numerous gifts of great importance to American colleges and universities. Among the most notable of these is that of Mr. J. Pierpont Morgan to Harvard University, of \$1,000,000, to be devoted to the promotion of research in the field of applied biology, that is, more particularly, of biology in its relation to medicine. Harvard received in the course of the academic year, in addition to this gift, somewhat more than three-quarters of a million of dollars. Brown University has completed a fund of \$2,000,000, which she has been raising with large assistance from Mr. Rockefeller. Yale University, preparatory to the celebration of

her bi-centenary, has nearly completed the raising of a \$2,000,000 fund. A beginning has now been made on the great architectural composition proposed by Mrs. Hearst for the University of California. And the list might be very greatly extended.

It is evident that we are in the midst of a great era of gifts to institutions of higher learning. It is difficult to find anything in the history of the world with which these facts can be compared. There were times in the Middle Ages when enormous gifts were made to institutions of a spiritual character; but those institutions were primarily ecclesiastical and only secondarily educational. The greatest industrial development that the world has ever seen is found to have as its corollary the greatest liberality in giving, and that particularly in giving to the extension of facilities for education. This is a fact of the utmost significance.

It is not strange that a fear should have arisen lest educational institutions should, under these circumstances, lose somewhat of their spiritual independence; and we find that the past year has been especially marked by the reappearance in critical cases of the question of academic freedom. Several institutions have been concerned with this question during the past year; but interest has centered in occurrences at the Leland Stanford Junior University. In the fall of 1900, soon after the presidential election, Edward A. Ross, professor of sociology in that institution, was dismissed under circumstances which have received various interpretations. It is known that Mrs. Stanford, the surviving founder of the institution, is virtually sole trustee during her lifetime. Certain utterances of Professor Ross, with reference especially to the question of Chinese immigration, had given serious offense to Mrs. Stanford, and she desired his removal from the teaching force of the institution. President Jordan did not agree with Mrs. Stanford in this matter, but found it advisable to follow her expressed desire. The removal of Professor Ross was variously regarded, not only in the outer world, but also within the teaching force of the university. A large majority of the members of the faculty sustained President Jordan. Other members declared emphatically their disapproval of his action, giving expression to their criticism both publicly and privately. The result has been that in the course of the year ten other members of the faculty have ceased to be connected with the institution, thru resignation or removal.

I will not undertake to pass any final judgment in this celebrated case. That may be left to writers who are able to make distance from the scene serve for historical perspective. Such writers have, I believe, generally agreed that the rightful freedom of instruction has, in this instance, been invaded.

So much as this, however, should be added: The sensitiveness displayed by the American people whenever the question of freedom of speech arises in any form is likely to prevent any serious abridgment of

such freedom in the future. Freedom of the press and freedom of instruction go together, and both are intimately bound up with the highest interests of our civilization; but there is no such thing as freedom apart from responsibility. The university man, like every other man, must exercise his liberty in the light of his duty to society. Universities, too, like all other institutions, live only in the co-operation of their members. It is not enough that a university man speak the truth; he must help his university to speak the truth as a university—to speak it with a united voice which must be heard. It is not only in university football that team work must be done. Team work must be done in university faculties. The responsibility for doing such team work goes hand in hand with the university instructor's claim to liberty of speech. Liberty is essential; but such things as these must be considered in determining where liberty lies in any given case.

The question of freedom of instruction is bound up with the question of university responsibility in another subject which has been under sharp debate during the past year. I refer to the subject of scientific instruction in the effects of stimulants and narcotics. The discussion of this subject has laid new emphasis upon our American conception of the unity of educational interests. We will have no school science which is not in accord with real science, and universities are responsible to the schools for determining the rightful content of instruction. This is a sacred responsibility, and the sense of its sacredness is growing with the growth of our educational institutions. As the part of education in the making of our civilization grows larger, it becomes more evident that educational institutions of all sorts must work in unison. No other nation has grasped this conception as has our own. The perfecting of our integration of educational forces is going steadily forward; and even the nations of Europe are coming to have some sense of its significance.

One of the chief forms in which the responsibility of universities to the lower schools has been coming to recognition is the training of teachers for those schools, and particularly for schools of secondary grade. It was the state universities which first came to an understanding of this responsibility. Within the past year some very important steps have been taken by our state universities in the direction of the improvement of their courses of pedagogical instruction. But the most important of recent movements in this direction seem to have been taken by Columbia and Chicago universities.

At Columbia University the Teachers College has had a very prosperous year. It has grown so greatly in numbers that the extensive buildings which it occupies are no longer large enough to accommodate both the college and the training school. A valuable piece of land has been acquired in the immediate vicinity of the college, and upon this has been erected a new building which provides separate accommodations for

the training school. This extension has cost half a million of dollars. In addition to this, the college has received a gift of \$100,000 from Mr. and Mrs. James Speyer, for the establishment of an experimental school. This school will be opened in one of the less-favored portions of the city. With it will be connected a Columbia University Settlement. Ample provision will be made for the introduction of the newer lines of school instruction. This school will be very different in its organization and purpose from the training school, and so will add greatly to the facilities at the disposal of the college for illustrating the processes of education in their greatest variety. The university now gives to graduates of Teachers College the degree of bachelor of science. In other important ways the integral relation of the college to the university has been abundantly emphasized.

At Chicago the important step has been taken of bringing the Chicago Institute into union with the university. The educational world has been deeply interested in this institute, from the time when Mrs. Emmons Blaine first announced her intention of establishing such a school. From the start it has seemed unfortunate that the institute should not be connected with the University of Chicago. It has finally become evident to both boards of trustees that the two institutions could accomplish much more unitedly than they could ever hope to accomplish separately. Accordingly, President Harper was able to announce at the university convocation in March that the union of the two had been accomplished. The institution in its new connection will be known as the University of Chicago School of Education. Mrs. Blaine, it is reported, has given a million dollars to further the work of this school. The Chicago Manual Training School, one of the pioneer institutions of this sort, which has achieved great successes; and also the South Side Academy, an efficient private secondary school, have been merged in this new School of Education. This makes a most notable combination of educational forces, devoted to the training of teachers for the elementary and secondary schools.

Meanwhile, the University Elementary School, carried on by the department of education of the university, under the direction of Professor John Dewey, has continued its remarkable work. The conviction is growing among schoolmen that this elementary school, in its present form, constitutes one of the most significant experiments in the history of American education, or, in fact, of world education. We have here, what has rarely been seen, an actual school embodying a profound philosophy of education. Professor Dewey's doctrine that the school is life, in its variously significant bearings, is here put to the test in daily school work under a carefully selected corps of teachers. It would seem of the greatest importance to American education that this experiment should continue. It can hardly be doubted that the university will honor itself,

and continue its service to the cause of public education, in continuing this school under the most favorable conditions obtainable.

Two years ago Superintendent Harvey, of Wisconsin, read a notable paper before this Council on the question, "Do we need a university trust?" The question was answered in the affirmative. More recently President Hadley of Yale has said in a public address: "We educators must form an educational trust." We may be sure that these eminent schoolmen have used the word "trust" in its better sense of an economical combination of forces, and not in its worse sense of a monopoly. During the past year the question of an economical combination of university forces in this country has been repeatedly discussed. One of the most important organizations actually effected for some such purpose as this is the Association of American Universities, which held its second annual meeting at Chicago last February. This organization consists of fourteen of the leading universities of this country. Thus far it has attempted nothing in the nature of legislation, and has refrained even from proposing legislation to its constituent members. But its discussions are tending steadily toward a union of action among our foremost universities in matters relating to graduate instruction. It cannot be doubted that the existence of such an association will do much to secure unity in the conduct of higher education in the United States, and a just recognition of American higher education abroad.

It would seem to many that the one effective form of university trust needed in this country is some sort of federal university at the city of Washington. The discussions of this subject within the past few years have called forth widely divergent views; but unanimity has been reached in the conviction that we need some sort of organization of advanced research in the capital of the nation. The difference of opinion as to the form of organization best calculated to accomplish this purpose is as great as ever; but a highly important step has now been taken by those who believe that what we need is not a new university added to the goodly number of really national universities which we already possess, but rather an effective co-ordination of the opportunities for research already provided in the various departments and institutions at Washington. This step is the organization of the Washington Memorial Institution. It is well known that provision had already been made by act of Congress extending to competent students the privileges of the various libraries and other means of investigation which abound in Washington. What has been lacking has been the means of bringing such students most readily into relations with such libraries and laboratories. The newly organized institution supplies this lack.

One of the noteworthy university happenings of the year was the withdrawal of President Gilman from the headship of the Johns Hopkins University, after a highly successful term of service of a quarter of a

century in the initial presidency of our initial experiment in the real higher education. The serious character of the new movement at Washington is emphasized by the fact that President Gilman was immediately called to the directorship of the new institution. No better man could have been found for the purpose. The personnel of the board of directors is such as commanded the confidence of the educational world as soon as it was announced; and that confidence has been strengthened by the appointment of President Gilman as their first director. It seems reasonable to expect that with the establishment of this institution—less than a university, to be sure, in that it does not give degrees; but more than a university in that it exists in and thru its co-operation with many universities and institutions of government—the higher education of our country will receive some such impetus and unification as it has so greatly needed. The Washington Memorial Institution should have, and doubtless will have, the hearty support of the friends of American university education. We need further information, however, with reference to its form of government and the range of its activities, before we undertake to determine the question whether it offers such organization of advanced research as we should ultimately have at our national capital.

It is a significant fact that the year has brought new emphasis upon the promotion and endowment of research. This emphasis has appeared in the establishment of the memorial institution to which reference has just been made. It has appeared also in Mr. Pierpont Morgan's gift to Harvard University. It has appeared in another and very notable form in the gift by Mr. Rockefeller of \$200,000 for the promotion of research in the sciences directly connected with the practice of medicine. It is understood that this gift of Mr. Rockefeller's is intended only as a beginning. A board of trustees has been organized to administer the fund and direct the investigations. Some of the investigations, we are told, will be conducted at the headquarters of the new institute in New York city. Others will be conducted by various co-operating university laboratories. The field open to such an institution is highly attractive, and embraces, moreover, numberless problems of the utmost importance to the whole people. It is fortunate that the personnel of the board of directors is such as to command public confidence, and particularly the confidence of competent scientific men. We have every reason to expect from this new movement results of the highest value, and its progress will be watched with the utmost interest.

It would seem a far cry from the consideration of the highest problems of university work to a discussion of the new problems of elementary education in the South; but the connection of all institutions of education is becoming so close in this country that the education of any section, in any grade or in any social class, is seen to be bound up with the education of all.

There is, moreover, a peculiarly intimate connection between the work of the University Elementary School in Chicago and the work of the institution for the education of colored people at Tuskegee in Alabama. The question of education in the South turns largely on the question of the education of the colored people. The colored people are now making their own contribution to the solution of that question. Their contribution consists in a new recognition of the fact that education is life, and makes for life; and they are working it out in one of the most interesting forms at Tuskegee. No educational book of the past year has excited more widespread interest than has the autobiography of Mr. Booker T. Washington. The unity of American interests, and particularly of American educational interests, has been emphasized by the reading of that book in all grades and classes of our society.

The new political movement in the South is understood by some to be chiefly a movement for the disfranchisement of the negro because he is a negro. In its practical working out it is not likely that it will take that form. It is, however, taking the form of the disfranchisement of the ignorant, the improvident, and the criminal. There are very few real leaders in the South who do not see that the chief need of the South, in its relation to the negro, is the lessening of ignorance, improvidence, and crime. There is great hope for the future in that southern white men and southern negroes are at one in recognizing this fact.

The Tuskegee program is very simple and comprehensible. It proposes that the negro shall make friends of his near neighbors, both white and colored; that he shall make himself indispensable to the community in which he lives; and that he shall let the question of social recognition take care of itself. One other tenet should be added, namely, that the negro shall keep himself very clean. There is a breadth of humanity and good sense in these views, which has taken strong hold upon our people; and the progress of the past year in this respect has been very marked.

It is to be hoped that the South will understand that she has the heartiest good-will of the country at large in all the efforts which she is making to improve political and industrial conditions thru the improvement of education. The education of the negro and of the white must proceed on parallel lines. Elementary education must be especially emphasized; but elementary education will not prosper continuously unless higher education receive also its due emphasis. The steady advance of higher education in the South has been noted during the past year by our people with great satisfaction, and it is hoped that by close co-operation between all educational institutions, from the lowest to the highest, the difficult problems of civilization in our southern states may be worked out in such ways as shall count for the good of the whole nation.

The past decade has been marked by a great movement for the

improvement of educational administration in American cities. The year with which we have to do has seen no remarkable advance in this respect. The newly organized systems have been going forward, with many a jolt and jar, to be sure; but they have undoubtedly been going forward. The new charter provisions for the Greater New York have swept away the last vestige of administrative functions in the hands of borough school boards. The system has been thoroly centralized, with the result that for the first time responsibility has been definitely located. Inasmuch as the new system still makes considerable provision for adaptation to local needs, there can be little doubt that it will be a great improvement on that which preceded it. The new schedule of salaries for teachers seems to be, on the whole, very liberal, and satisfactory to the members of the profession. The Chicago Board of Education has had an interesting year. More complete provision for the systematic study of school children has been made by this board than is to be found in any other great American city. The first report of the investigations carried on under the authority of the board is full of interest. One of the most recent reports from Chicago is to the effect that the board has adopted, by a large majority, the proposed provision for free text-books in the primary schools.

The chief obstacle encountered in Chicago in the effort to introduce free text-books was the opposition of the friends of parochial schools. In many ways the problem of religious education, or of education under ecclesiastical auspices, has come to the front within the past year. Attention may be called especially to the impression produced by the meeting of the Association of Catholic Colleges at Chicago, in February. Mgr. Conaty, president of the Catholic University at Washington, presided at this meeting. In the course of his remarks he called attention to the fact that the Roman Catholics had expended in this country during the preceding year \$25,000,000 on their institutions of education, not including the colleges and universities. One million pupils were enrolled in these schools, about 13,000 of whom were in institutions of higher education. The movement for the establishment of Roman Catholic parochial schools received its great impetus from the meeting of the third plenary council at Baltimore in 1884. Since that time the growth of Catholic parochial schools has been very remarkable. Thus far the Catholics have devoted their energies chiefly to schools of the elementary and higher grades. The Association of Catholic Colleges at its meeting this year recommended that from this time on special attention be devoted to the establishment of Catholic high schools. A small number of such schools have already been established. It seems not unlikely that this number will be very greatly increased within the next few years.

It would appear to many that the movement for the establishment of parochial schools is the one discouraging feature in the outlook for unification of our American educational forces. It should be said, however,

that the unification of education does not necessarily involve anything like a government monopoly of education. The differentiation of our educational institutions to meet a variety of American tastes and tendencies is not necessarily dangerous, nor even undesirable. The main thing is that those who are engaged in education of all kinds, in all its grades and branches, shall understand one another. With the growth of parochial schools it becomes increasingly desirable that there shall be free intercourse between the teachers of these schools and of the public schools. Whatever their differences of educational ideal, purpose, and administration, teachers everywhere should present a solid front in the forward movement of civilization, as against the forces of selfishness, ignorance, materialism, and all the powers of darkness. I believe that the teaching bodies of our educational institutions of all sorts are made up of patriotic Americans; and, as patriotic Americans, they will co-operate wholeheartedly for the promotion of the best things in American life, if only they come freely together and learn to understand one another.

There are many movements of only less importance than those already referred to of which we can offer no extended notice here, for lack of time. Some of these may be referred to with the utmost brevity.

Our normal schools have, during the year, been moving forward in the matter of entrance requirements. In the more favored states these schools are already in a position to enforce the requirement of high-school graduation for admission. Other states are moving steadily toward this standard.

The Herbart Society has been reorganized during the past year, taking the name of the National Society for the Scientific Study of Education. In its earlier form this society has done much good service; but it has not been able to throw off entirely the character of a propagandist institution, which its very name seemed to fasten upon it. As reorganized, the society has adopted a very promising program. It swears by no master, and seeks only to apply the scientific spirit and scientific methods to the study of educational problems. There is a large field for such an organization, after all others of our educational societies have done their best; and it is hoped that it may prosper in all good works.

The College Entrance Examination Board of the Middle States and Maryland is now an accomplished fact. During the past month this board has conducted its first examination. This examination has extended to the remotest sections of our own country, and even to foreign lands. The leading institutions of the middle states have agreed to accept the results of this examination, and in this they have been joined by institutions in other portions of the country. The *Pedagogical Seminary* becomes gloriously militant in its attack upon the mechanism involved in these examinations.¹ It may be said, however, in defense of the new

¹ See the *Pedagogical Seminary*, Vol. 7, p. 450, October, 1900.

movement, that a big machine is not necessarily more mechanical than forty little machines ; and that it is great gain if the secondary schools can be relieved of the inconsistent whimsicalities of forty examining boards, by being brought into relations with one board, including representatives of the schools, under which the conduct of entrance examinations has been carefully unified. So long as our eastern brethren, in the hardness of their hearts, pin their faith to entrance examinations, it is to be hoped that they may at least remove some of the more glaring defects of the examination system, thru the operation of such a board as has been organized. It will be good for the institutions concerned to work together in this matter, and some real and large educational advantage seems likely to come out of it all.

In no other way have we more definitely taken up the "white man's burden" than in the attempt to build up American systems of education in our new possessions, and in Cuba. The migration of nearly fifteen hundred Cuban teachers to Cambridge last summer, and their participation in the summer school of Harvard University, had a certain spectacular value. The immediately educational results of this undertaking seem to have been small, as might have been expected ; but in a larger way its educational value was undoubtedly very significant. It called the attention of the Cubans in a striking manner to American ideals in education. And it called the attention of the American people, in an equally striking manner, to the educational problem in Cuba. Great credit is due to the authorities and members of Harvard University for their action in this matter.

The first report of the Taft commission to the Philippine Islands shows clearly that the hopes of American civilization in those islands are chiefly centered in the new educational movement. Dr. Fred W. Atkinson assumed the superintendency of the Philippine educational system on September 1, 1900. Already important progress has been made. A large number of American teachers have been taken to the islands to engage in instruction and the supervision of schools. Our American universities and normal schools have been sending some of their best graduates to take part in this service. Forty-two have already been sent by the University of California alone. There is something very inspiring in a new crusade of enlightenment such as this promises to be. The Taft commission proposes that the educational administration of the islands shall, for the present, be strongly centralized, but that encouragement shall be given to local initiative and responsibility ; that all schools supported by public funds shall be free and non-sectarian ; that especial attention shall be paid to the utilitarian side of elementary education, with a view to making every person self-dependent in the gaining of a livelihood ; that instruction in agriculture and in other subjects of a vocational value shall be promoted ; that the English language shall be introduced gradually ; that the salaries of teachers shall be raised ; that new

teachers shall be brought in from the United States; and that a normal school shall be maintained at Manila. Dr. Atkinson's estimates call for the expenditure of more than \$1,500,000 by the insular government for schools during the current year. It is reported that Mr. Atkinson has sent to this country for a thousand more American teachers, many of whom are to be men.

Professor M. G. Brumbaugh began his work as commissioner of education for Porto Rico on August 6, 1900. Ten weeks later he presented his first report. Here the management of the schools is not so strongly centralized as in the Philippines, and progress must accordingly be slower. A normal school has been established, but its location seems to be not altogether eligible. Teachers have been gathered into institutes, but the success of these gatherings seems to have been very uneven. Provision is made for one teacher of English for each graded school. When Professor Brumbaugh's report was rendered, there were 38,000 pupils in the schools—a very substantial increase over the preceding year. But there are still 300,000 children in the island for whom no schooling has been provided.

So far as the Hawaiian Islands are concerned, it may be remarked that they had long been provided with a well-organized system of schools before the group was annexed to the United States. The fine progress which the Hawaiian schools have been making in recent years is shown by the fact that the exhibit which they sent to the Paris Exposition of 1900 was honored with the *grand prix*, the highest form of award given by the exposition.

Two suggestions occur to one as pertinent to this topic: first, it would be advantageous if those who are working in these undeveloped educational fields might come into closer touch with those educational methods which have proved so effective at Hampton and Tuskegee; secondly, it is eminently desirable that we strengthen the bonds of connection between this work in our semi-foreign territories and the United States Bureau of Education.

In spite of many obstacles, the American commission to the Paris Exposition succeeded in making a very praiseworthy exhibit of American systems of education. This exhibit secured more awards than did the educational exhibit of any other nation, with the single exception of France, the home country of the exposition. Hon. Howard J. Rogers, who was in charge of our educational exhibit, has drawn up a list of these prizes. They include 41 awards of the *grand prix*, 64 gold medals, 41 silver medals, 16 bronze medals, and 6 awards of honorable mention.

It appears from both American and foreign accounts that an excellent impression was produced by this exhibit. We are assured that foreign visitors to the exposition were especially impressed by the fact that

American educational systems seek to give a broad, general training to all students alike, and to postpone specialization as far as possible; and that they pay especial attention to developing the natural capacities of the children, and giving them power of individual initiative. If foreign nations shall learn from us in these particulars, it is only a reasonable return for the many good things which we have learned from them. It would seem that the nation which gets the most good from one of these world expositions is the nation which shows the greatest capacity for both giving and taking.

There has been much of interest during the past year in the educational progress of those culture lands whose interests lie nearest to our own. We find, too, that the movements with which we are familiar at home are closely related with movements in these countries. The international character of our civilization receives repeated emphasis in these days.

In England there are many signs that the expansion and integration of educational interests and institutions are proceeding, more slowly than with us, to be sure, but perhaps quite as surely. The federation of the provincial colleges of England goes steadily forward. Progress has been made during the past year in the development of the new University of London. A large part of one of the great buildings at South Kensington has now been set apart for the use of this university. Properly housed, it seems in a fair way to become a great metropolitan teaching university, without ceasing to be the institution for the conduct of examinations which it has been in the past.

The new board of education has appeared in English educational affairs like the dawning of a new day. One of the first acts of this board, under the provisions of the statute which created it, has been the appointment of a very influential conservative committee, in which the various important educational bodies of the country are largely represented. As it was the consideration of the problem of secondary education which was largely responsible for the formation of the board of education, so we find, quite naturally, that this problem is among the most urgent of those with which the new board is expected to deal. There is little to record as yet in the way of definite advance toward the solution of this problem.

One important occurrence of the past year, however, must be noted. The local school boards in England have shown a disposition to extend in an upward direction the instruction offered in the schools under their control. As a result, many of the board schools have been giving instruction of an advanced grade. This movement is closely analogous with that which has been going on in America for the past sixty years or more, and has given us our great system of public high schools. The question whether our local school authorities were justified in making such extension of the work of the elementary schools came up for decision in the

courts of Michigan in the famous Kalamazoo case of 1874. The decision of the supreme court of Michigan in that case, prepared by the late Judge Thomas M. Cooley, marks a turning-point in the history of American education. It declared unequivocally the right of communities to extend the education given in the public schools so far as they might choose, provided only that they were willing to tax themselves for the purpose. The corresponding English movement has come up for determination in an English court during the past year, with a result directly opposite to that in our own Kalamazoo case.

This question has not yet been decided in a court of last resort. Whatever the ultimate decision may be, there can be little doubt that, by parliamentary action, if need be, such extension of English elementary education will sooner or later be authorized and encouraged. If this result is secured, we may expect to see the upgrowth of a great system of local schools in England of higher-elementary, and even secondary, grade. When we consider the fact that the development of American high schools has come to be a dominant force in the development of American civilization, and has in particular given an unprecedented impetus to American university education, we can understand the possibilities of such a movement among a sister-people like that of England.

In France, too, the dominant educational interest of the past year has had to do with secondary education. Professor Nicholas Murray Butler, in his report on educational progress presented to this Council two years ago, made note of the fact that the French Chamber of Deputies had instituted a commission of thirty-three members, under the headship of M. Ribot, to make an extensive inquiry into the whole secondary-school problem, and present a report of its findings. This report has now been presented in five large volumes; and it is supplemented by a very important little book by the chairman, entitled *La réforme de l'enseignement secondaire*.

The recommendations of this commission touch certain vital points in the French secondary-school situation. In general, they call for a larger amount of freedom on the part of local school authorities, within the limits of very general prescription. They propose the discontinuance of the baccalaureate at the close of the secondary-school course. On the question of the requirement of the classical languages for entrance upon all courses leading to the professions of law and medicine, the commission declares itself, by a majority of only one vote, in favor of maintaining the present requirement. Another recommendation is that free (or, as we should say, private) schools be subjected to state inspection. These free schools are mainly ecclesiastical institutions. Since the state and the church are openly competing in France for the upper hand in secondary education, the recommendation last mentioned touches a sensitive point. The discussion of this report, and of the recommendation

of other official bodies upon the same questions, has filled a large place in French educational thought during the past year. Speaking in general terms, an eminent French professor remarks, in substance, in a recent letter: "The spirit of our public education may be briefly summed up by saying that it tends to become more 'educative,' to draw nearer to life, to render the human spirit free and ready to express itself in action."

In Germany, again, one of the chief questions of the year has been a question relating to secondary education. It will be remembered that the so-called Frankfort plan was first introduced in 1892. This plan provides, in all nine-year secondary-school courses, that the first three years shall be free of any requirement in Latin, French being substituted for Latin in this portion of the course. This plan is intended to give all forms of secondary schools a common foundation course, and so to postpone the final selection of a boy's course in life to as late a point as possible. The year 1901 is a critical year in the history of this experiment, because it is in this year that the first classes which entered upon courses of this sort reached the end of their secondary-school training. The Frankfort plan has, accordingly, been under especially active discussion during the year just past. One of the most notable documents which have appeared in the course of this discussion is the so-called Brunswick Declaration (*Braunschweiger Erklärung*). A convention of the friends of technical and scientific education meeting in Berlin had declared in favor of changes substantially the same as those made under the Frankfort plan, and also of the recognition of graduates of all nine-year secondary schools for admission to all of the higher courses of professional training. The German Gymnasium Association, which assembled a little later in Brunswick, met this declaration with a counter-declaration. They declared their adhesion to the present gymnasial course, with its full nine years of Latin, and demanded especially that there be no reduction of the time devoted to Greek. But, in the second place, they put themselves on record as having no opposition to offer to the proposal that all nine-year courses be placed on an equality of rights and privileges. This declaration was then sent out for signature to friends of the *Gymnasium* thruout Germany, and was finally published in January of this year, with an appended list of 14,330 adherents, including almost every one of undoubted classical orthodoxy in all the land. The fact that such an overwhelming declaration in favor of the traditional course in the *Gymnasium* has been put forth would lead a foreigner to guess that the victory is well-nigh won for the opposing party; and this view is emphasized by the fact that, in their anxiety to maintain the status of the classical languages, the Gymnasium Association felt it necessary to disclaim all opposition to the proposal that graduates of the *Oberrealschule* and the *Realgymnasium* be granted equal rights with graduates of the *Gymnasium*.

The somewhat indefinite reports of student disturbances in the universities of Russia which have come to us have excited widespread interest. The fact that students and workingmen have joined in riotous opposition to the government is significant of the union of industrial and educational forces in the Russian liberal movement.

Returning to our own land, we may take a brief glance at the educational literature of the past few months. It is to be noted, in the first place, that the number of educational books which appeared during the year 1900 was considerably greater than those of the preceding year.¹ In 1899 there were published in this country 387 new books on education, and 32 new editions of old books on education. During the year 1900 there were issued 431 new books and 210 new editions. Education still stands fourth in the order of publications, being surpassed in number by books of fiction, works on law, and juveniles.

Of the books which appeared in the first half of the year 1900, Professor Hinsdale, in his report of a year ago, gave the first place to the series of nineteen monographs on *Education in the United States*,² edited by Professor Nicholas Murray Butler, as a contribution to the American educational exhibit at Paris. It may be added that this series of monographs received an abundance of praise and prizes at the hands of visitors and juries at the exposition.

Of other books which appeared during the year 1900, a few which seem to be of especial significance may be mentioned here, at the risk of omitting many of equal importance. Attention should, however, be called, first of all, to two important contributions to our educational bibliography. I refer to the "Bibliography of Education for the Year 1900," prepared by Mr. Wyer and Miss Lord;³ and to the continuation of former bibliographies of child study, prepared by Mr. Wilson, of Clark University.⁴ Such work as this is of the utmost value to students of education in its several aspects. It may not be amiss to add that we need in this country something analogous to the publications of the Gesellschaft für deutsche Erziehungs- und Schulgeschichte. An American publication of this sort, however, should include some account of current foreign publications, and particularly a summary of the principal official publications of other lands. This suggestion is respectfully submitted to the consideration of our Commissioner of Education.

The year 1900 gave us three important additions to our literature of the history of American higher education, in the shape of the decennial

¹ See summary in *The Publishers' Weekly* for January 26, 1901.

² NICHOLAS MURRAY BUTLER (editor), *Education in the United States*. A series of monographs prepared for the United States exhibit at the Paris Exposition of 1900. 2 vols., pp. 464, 514. Albany, N. Y.: J. B. Lyon Co., 1900.

³ JAMES INGERSOLL WYER, JR., and ISABEL ELY LORD, "Bibliography of Education for 1900," *Educational Review*, Vol. 21, pp. 382-421, April, 1901.

⁴ LOUIS N. WILSON, "Bibliography of Child Study for the Year 1899," *Pedagogical Seminary*, December, 1901.

volume of Clark University,¹ Montgomery's history of the University of Pennsylvania,² and Thwaites' history of the University of Wisconsin.³

The growing importance of universities in our national life makes such volumes as these greatly to be desired by all students of American history.

An important new series has been well started for us by the publication of Professor Smith's book on the teaching of mathematics.⁴ Thomas Davidson left us a choice legacy in his little book on the history of education⁵—a work not crowded with mere information, but rich in interpretations. President Thwing has struck out a new and important line in his work on *College Administration*.⁶ Another new note has been sounded in the volume of lectures on *Principles of Religious Education*,⁷ a book which seems to show a new interest in the problem of religious instruction.

Of the books which have already appeared during the year 1901, attention has been called to the autobiography of Mr. Booker T. Washington.⁸ Another work, remote enough from this, but very significant in its own way, is Bennett and Bristol's *The Teaching of Latin and Greek*.⁹ This book is not only of value in itself, but is also important as beginning a new series. In Smith's book on the teaching of mathematics, and Bennett and Bristol's book on the teaching of the classics, we see the beginnings of a real literature of the pedagogy of secondary-school subjects. The Germans have long been in possession of such a literature. We are just making our first essay in this field, but the beginnings are representative of some of the better tendencies in our American education, and promise well for the future.

The latest report of our Commissioner of Education is well up to the high standard of recent publications of this sort. Some recent state and city reports seem to indicate a rising standard in this important branch of our educational literature. Valuable additions have been made during the year to some of our well-known series, especially to the American Educational History series, published by the Bureau of Education ;

¹ Clark University, 1889-99, decennial celebration. Pp. 566. Clark University, 1899.

² T. H. MONTGOMERY, *A History of the University of Pennsylvania from its Foundation to A. D. 1770*. Pp. 600. Philadelphia: George W. Jacobs & Co., 1900.

³ R. G. THWAITES (editor), *The University of Wisconsin; its History and its Alumni*. Pp. 900. Madison: J. N. Purcell, 1900.

⁴ DAVID EUGENE SMITH, *Teaching of Elementary Mathematics* (Teachers' Professional Library). Pp. 312. New York: The Macmillan Co., 1900.

⁵ THOMAS DAVIDSON, *A History of Education*. Pp. 292. New York: Charles Scribner's Sons, 1900.

⁶ CHARLES F. THWING, *College Administration*. Pp. 321. New York: The Century Co., 1900.

⁷ *Principles of Religious Education*; lectures delivered under the auspices of the Sunday-school commission of the diocese of New York. Pp. 292. New York: Longmans, Green & Co., 1900.

⁸ BOOKER T. WASHINGTON, *Up from Slavery: an Autobiography*. Pp. 330. New York: Doubleday, Page & Co., 1901.

⁹ CHARLES E. BENNETT and GEORGE P. BRISTOL, *Teaching of Latin and Greek in the Secondary School*. New York: Longmans, Green & Co., 1901.

the International Education series; the series of Handbooks to the Great (English) Public Schools; and the Columbian University Contributions to Philosophy, Psychology, and Education.

Our study of educational progress during the past year could not give us any sure or final estimate of the tendencies of this time. A few things, however, seem reasonably clear. As the year has been a year of tremendous expansion in many departments of life which vitally affect our civilization, so it has been a year of expansion in our educational institutions and interests. Education has seen expansion because of its intimate connection with all of the other interests of human life; because it is rapidly coming into more vital connection with those interests. It is expanding with unexampled rapidity, because we are coming to look to education more and more to help us in the great concerns of national, industrial, and social life. But this expansion is not mere increase in bigness. "It is not growing like a tree." It is an expansion which involves increasing complexity and fineness of relations, both internal and external. With this growth is coming a heightened sense of the unity of educational institutions, and an increasing disposition to bring education into close co-operation with all other agencies which make for the higher life. It is bringing with it increased seriousness and sense of high responsibility. On the whole, we may say that during the past year our literature of educational institutions and educational practice has filled a larger place than our literature of educational theory. The very fact that we are entering upon such tremendously great movements in the practice of education emphasizes our need of increased thoroness in the working out of educational theory: not greater attention to petty detail, but more of real fineness and thoroness of conception. In particular is it true that we need a more thoro mastery of the theory of education in its institutional aspects. The progress of the time seems to point hopefully to the development in the near future of a sound theory of education in vital connection with a sound theory of the modern state.

In Memoriam

Dr. Burke Aaron Hinsdale

JAMES B. ANGELL, PRESIDENT OF THE UNIVERSITY OF MICHIGAN

Members of the National Council:

As you have today gathered at your annual meeting, you have profoundly missed the presence of your friend and colleague, Dr. B. A. Hinsdale. He was so deeply interested in the problems with which this body has to deal; as a member and as president of this Council, he has taken so conspicuous a part in your proceedings; he was looking forward with so much enthusiasm to this occasion, and he would so certainly, if his life had been spared, have participated in your discussions, and to the edification of us all, that we naturally and properly set apart a few minutes to consider his career and his services and his character.

Burke Aaron Hinsdale was born at Wadsworth, O., March 31, 1837. He came of good New England stock. His parents, born in Connecticut, removed, like so many other natives of that state, to the Western Reserve, and engaged in farming. Here the son, as he grew up, was inured to the toil of pioneer life. In his boyhood his educational facilities were limited to those furnished by the district school. At the age of sixteen, however, he became a pupil in the Eclectic Institute at Hiram, afterward better known as Hiram College. There as student, professor, and president most of the time, the next thirty years of his life were spent. There he formed that intimacy with Garfield which was to be so fruitful of good to both of them.

From the outset of his college life Mr. Hinsdale showed remarkable powers of acquisition and that untiring industry which marked his whole career. As a professor at Hiram he made a marked impression on his pupils by his thoroughness, his breadth, and his suggestions. Almost as soon as he began his work of teaching, he also began the work of preaching, and continued both kinds of duties for years. As if those labors were not enough, we find that he united with them the responsibility of associate editor of a denominational weekly, to which he was a constant contributor. While he was president of Hiram College, from 1870 to 1882, he taught classes in history, rhetoric, literature, and philosophy, continued his preaching and his contributions on religious and educational subjects to the newspapers and reviews, gave frequent lectures in Ohio, published two volumes on religious themes, prepared a campaign text-book in 1880, when his friend Garfield was a candidate for the presidency, and immediately after the president's death brought out a book

entitled *President Garfield and Education*, and the following year an edition of Garfield's works. His power and his passion for labor seemed to pass all reasonable limits. But his herculean strength as yet endured the strain.

In 1882 he accepted the position, which came to him unsought, of the superintendency of the Cleveland schools. This opened a new field of educational activity to him. But his reports and his addresses to the teachers soon showed that he was studying the problems in hand with the same thoroughness and activity which he had brought to his collegiate duties. His experience and observation there led him later to commend in earnest terms the plan, which has since wrought so beneficent results in Cleveland and others of our large cities, in allotting the business affairs and the educational affairs of the schools to different officers.

At the close of his four-years' term of service in Cleveland he wrote what is perhaps his most elaborate work, entitled *The Old Northwest*. Its high historical value has been recognized by our leading scholars. It furnishes one of many proofs that few men were better read than he in the original sources of American history, and has sometimes suggested expressions of regret that he had not given more of his time to the production of other works on the history of our country:

On the resignation of W. H. Payne as the professor of the art and science of teaching in the University of Michigan, Mr. Hinsdale was chosen as his successor. He entered upon his duties in February, 1888, and occupied the chair until his death, which occurred at Atlanta, Ga., on November 29, 1900. He filled the position with eminent success. His historical tastes gave coloring and shape to his pedagogical work, while his wide and varied experience, ranging from that of a district school-teacher to that of president of a college and that of superintendent of the schools of a large city, fitted him to enrich his instruction with suggestive practical lessons. He naturally gave much time to the history of educational systems and experiments, and drew from them sane and valuable conclusions. Tho familiar with the great variety of educational theories which the last few years have launched, and appreciating whatever was valuable in them, he was guarded by his great store of common-sense from mounting any hobby, or from allowing his students to be carried away by any "fad" without having the advantage of proper warning from him of the unwisdom of such a course. His class-room utterances, without assuming the air of dogmatism, had a certain judicial weight which usually carried conviction and always commanded respect. He had strong personal sympathy with his students, and took the deepest interest in assisting them in their professional career.

He was a most helpful and conscientious college officer. Tho crowded with his own special work, he was most faithful in service on committees of the faculty. He felt a deep concern in the general welfare

of the university, and was always ready to do all in his power to promote it. His counsels on questions of university policy and administration were regarded by me and his colleagues as of the highest value. Especially was he deeply concerned about the relations of the university to the schools, and about our supreme duty to do all in our power to co-operate with the schools and to improve their efficiency. He took the broadest view of the unity of our whole system of public education from the primary school to the university.

His twelve years of life at the university were to him years of growth. His mind became broader, richer, more vigorous with each passing year. In addition to the scrupulous discharge of his duties as a professor, he produced nearly a volume a year during his life at Ann Arbor. Among them were the following: *The American Government, How to Study and Teach History, Jesus as a Teacher, Teaching the Language Arts, Studies in Education, Civil Government of Ohio, Life of Horace Mann, The Art of Study*. Each of these works has positive worth. Three or four of them have very great value, and are familiar to you all. A *History of the University of Michigan*, which cost him much work, and which was barely finished at the time of his decease, is about to appear. Besides, he was a constant contributor to newspapers and magazines and educational journals. He had in hand, when his last illness seized him, a considerable amount of material for other works. His zeal for labor was unabated. We who were his colleagues often besought him to take more respite from his excessive toil. Trusting to the robustness of constitution with which nature had endowed him, he was deaf to entreaties of that sort. There can be no doubt that he overtasked his strength, and so shortened his days. But life without the power to labor had no attractions for him. In one of my last conversations with him he said: "If I am to be disabled so that I cannot work, I do not care to live."

The members of this body would certainly regard this sketch of our friend as very incomplete, if a word were not said of his power in debate. His mind was so thoroly disciplined, his stores of knowledge on any subject which he was willing to speak upon were so ample, his settled opinions were so clearly and sharply defined, that, altho he would not be deemed an orator, he never participated in a debate without contributing something weighty and convincing toward the right settlement of the question under discussion. He was especially happy in summing up at the close of a debate the valid arguments which had been adduced on either side, and in exposing the weakness of positions which did not commend themselves to his judgment.

Altho Dr. Hinsdale was held in the highest esteem by those who knew him only thru his writings, by reason of his intellectual gifts and his large attainments, to those who had the pleasure of a personal acquaintance with him he was even more endeared by their regard for

his pure and noble character. He was absolutely without guile, magnanimous and charitable in his judgments, helpful to all whom he could serve, manly in the amplest sense of the term. He was frank and fearless in forming and in expressing his opinions, but he cherished no bitterness toward those from whose views he dissented. He could differ widely from another and discuss sharply with him without cherishing the slightest personal animosity toward him. There was a breadth and largeness of make both in his mind and his heart. There was a downright honesty and integrity, and a certain robustness and vigor, both in his intellectual and in his moral nature, which gave great weight to his personality. The fruitage of his earnest and busy life has enriched his generation, and will be long and gratefully remembered by the thousands who have profited by the results of his labors. This Council and the National Association, in both of which he has performed so many valuable services, and in both of which he had the deepest interest, will cherish his memory as one of their dearest treasures.

Dr. Henry Barnard

*HENRY BARNARD'S INFLUENCE ON THE ESTABLISHMENT OF
NORMAL SCHOOLS IN THE UNITED STATES*

ELIPHALET ORAM LYTE, PRINCIPAL FIRST PENNSYLVANIA STATE NORMAL SCHOOL, MILLERSVILLE, PA.

Standing on the bank of a tempestuous stream, which is rushing onward to the sea, and carrying with it soil and timber and even boulders, one would find it difficult to say which part of the stream carries the soil, which part the timber, and which part the boulders. Somewhat the same problem confronts one who attempts to say to what extent Henry Barnard influenced the establishment of normal schools in the United States. His educational life seemed to carry educational institutions of all kinds with it in its onward sweep. Whatever it was best to do for the advancement of education, Henry Barnard tried to do, whether it was to organize state systems of schools, to criticise existing systems, to suggest better systems, to start the wheels of educational machinery in city or state, or to record the progress of educational institutions thruout the world. His object was the furtherance of public education. The means used for this object were the means he could first seize hold of. A brief sketch of his labors in the direction of the establishment of normal schools will, however, not be out of place, tho it must necessarily be an insufficient presentation of the man himself.

In 1838 Henry Barnard became the actual head of the school system of Connecticut, at the early age of twenty-seven. Horace Mann had

begun his educational work in Massachusetts the year before. The conditions existing in the two states were, however, not the same, and Barnard's work must necessarily be on different lines. The common schools of Connecticut at that time were controlled by an organization known as the "School Society," and there was great indifference among the body of the people with respect to public-school education. Henry Barnard's first work was to arouse the people to a proper appreciation of the deficiencies of the public-school system and to create a genuine public sentiment in favor of public schools. In 1837, as a member of the legislature of Connecticut, he had led the movement that culminated in the passage of the school law of 1838, which, as has been said, was the beginning of a new era in the history of popular education in Connecticut. In his first speech before the legislature of Connecticut he referred to the establishment of schools for teachers in the following words :

It is idle to expect good schools until we have good teachers, and the people will rest satisfied with such teachers as they have until their attention is directed to the subject, and until we can demonstrate the necessity of employing better, and show they can be made better by proper training in classes or seminaries established for this specific purpose.

The law passed at that time provided for a state board of commissioners of common schools, and Henry Barnard was elected secretary of the board. The duties of the secretary as prescribed by the board were, first, to ascertain the actual condition of the schools ; second, to inform the legislature of their condition, and present plans and suggestions for the better organization and administration of the school system ; third, to address educational meetings in every county in the state ; fourth, to edit a journal devoted to common-school education ; and fifth, to increase the interest of the community in relation to popular education. Strange as it may seem, in 1842, only four years later, the legislature of the state reversed the policy adopted in 1838, and repealed the legislation of that time ; but the movement started could not be repealed or reversed by a legislature. The people of Connecticut became interested in the public schools, and in 1846 a convention of 250 teachers and friends of schools was conducted for four days at Hartford, followed in 1847 by the two largest school institutes that were ever held in Connecticut, and that were said by Superintendent Peirce to be "the most important events in the history of the common schools for the last ten years."

The following year sixteen teachers' institutes were held, and in 1849 the joint committee on education in the legislature reported a bill to establish and support a state normal school, and made an appropriation of \$2,500 a year for this purpose. This school was founded in 1850, at New Britain, and Henry Barnard was recalled from Rhode Island to take the principalship of the New Britain State Normal School and the superintendency of the state of Connecticut. The school at New Britain

enrolled during the first year 154 students, and is still in existence, tho it was suspended from 1865 to 1869, and again in 1874 for a year. This institution was the fruitage of the seed sown by Henry Barnard during his first term of service at the head of the schools of his native state.

Soon after Henry Barnard was legislated out of office by the action of the Connecticut legislature in 1842, he was invited by the governor and legislature of Rhode Island to become the first commissioner of common schools of that state, and assumed the duties of this office in 1843. Rhode Island had at this time a school law which is practically the foundation of the present system of public education in the state. The one lack of the system was the centralizing influence which comes from the office of state superintendent of public schools, and this defect was remedied by the legislature this year enacting a provision for a state superintendency of common schools. To this office Mr. Barnard was called, and assumed the duties of his position September 1, 1843. His first work here, as in Connecticut, was to study the school system of the state and learn its actual condition. During the first two years of his term of office he visited every town in the state, inspected a large number of schools, held a great many public meetings, and issued a number of circulars to teachers and school officials.

At all the meetings held, one of the most important topics discussed was the necessity of a thoroly organized state normal school. In 1844 the legislature of Rhode Island invited Commissioner Barnard to prepare a new school statute. Mr. Barnard's plan with respect to normal schools was to have two state normal schools, one in Providence and one in the country; and a bill was passed in 1845 authorizing the establishment of a thoroly organized state normal school in the state. No appropriation, however, was made for carrying the law into effect. The people were authorized to build a normal school and pay for it out of their private pocketbooks, and declined to comply with the suggestion. As a result of Mr. Barnard's agitation of the subject of normal schools, however, Brown University a short time afterward established a professorship of didactics. A few years later normal classes were taught in the Providence High School, and in the fall of 1852 a normal school was opened in rooms rented for the purpose, with three teachers and eighty-five students. In May, 1854, upon the urgent recommendation of School Commissioner Potter, who succeeded Dr. Barnard, the general assembly passed an act establishing a state normal school, and appropriated \$3,000 for its support. This school opened in May, with twenty-seven students, and was the forerunner of the Rhode Island Normal School established at Providence, which now has one of the largest and finest normal-school buildings in the United States.

As early as 1856 School Commissioner Robert Allyn said in his report to the general assembly:

The effect of the graduates of the normal school is already felt to some extent for good upon the teachers of the state. They have gone abroad into various schools, and by coming into contact with other teachers, and by making popular the methods of instruction learned in the normal school, they are gradually but surely causing the standard of attainments in school-teachers to rise, as well as the standard amount of duties they shall be required to perform. If such an influence begins to be apparent within two years from its commencement, we may with certainty expect that its benefits will constantly increase till all parts of our state shall feel it and be made better thereby.

Henry Barnard resigned from the superintendency of the Connecticut schools in 1855, and in June, 1859, he became chancellor of the University of Wisconsin and agent of the board of normal regents of the state. At this time Wisconsin stood near the head of the common-school states in the proportional number of children of school age and in the size of her school fund. The state had been educationally aroused by the work of Hon. Lyman C. Draper. One of the most important topics under discussion at this time in the state was the question of training of teachers. In 1857 the legislature had passed a law for the establishment of a new school fund from the income of an extensive region of land. This income was to be divided among such high schools, academies, and colleges as would submit themselves to an examination and parish supervision by a board of state normal regents. A normal department was also established in the university, and a small appropriation was made for a chair of pedagogy. Teachers' institutes had been established in a number of counties in the state, and several institutions had availed themselves of the appropriation for normal instruction. Dr. Barnard's duties as agent of the normal board of regents were "to visit and exercise a supervising control over the normal departments of all such institutions as shall apply for a participation in the normal-school fund, to conduct teachers' institutes and normal instruction in the same, and to co-operate with the superintendent of public instruction in procuring a series of public educational addresses to be delivered in the various parts of the state." During the autumn of 1851 he conducted a series of institutes in twenty or more counties, and aided in laying the foundations of one of the completest systems of state normal schools in the United States. In Wisconsin, as in Pennsylvania and other states, teachers' institutes were the forerunner of regular state normal schools.

As I said at the beginning of my remarks, Henry Barnard's work in the establishment of normal schools was one of a number of objects, all leading to the one great object of elevating public education. An indefatigable worker, thoroly devoted to the cause of public education, with clear vision, he saw that no system of education could be successfully administered without a system of state normal schools as an integral part of the general system of education. He realized that school machinery is deadening, that the teacher is the center of the school, and that all real progress in school work must finally be made thru the teacher. With

this clear view, it was impossible for Henry Barnard not to do all that could be done for the establishment of schools for the training of teachers. It is probably within the bounds of truth to say that in his work as editor of the *American Journal of Education* he did as much for the diffusion of educational literature and the elevation of the profession of teaching as in any other way. His influence thru this monumental publication reached localities and states that otherwise would not have felt his influence. As the result of this publication, better school buildings were demanded, better teaching was required, and closer supervision became necessary. Training schools were established in towns and cities, and the necessity of special preparation for the vocation of teaching became impressed upon schoolmen in all parts of our country.

The *International Review* for January, 1874, says of the *American Journal of Education* and its editor :

These volumes constitute an encyclopædia of facts, arguments, and practical methods which no organizer or teacher can afford to be without. Besides the preparation of these works, Dr. Barnard has delivered lectures and addresses on his favorite subject numbered literally by thousands. Probably no one man in the United States has done as much to advance, direct, and consolidate the movement for popular education. In looking back to the commencement of his lifelong labors, it would seem that he must contemplate with eminent satisfaction the progress of public sentiment and the good results already attained, as well as the brightening prospects for the future. He has done a work for which his country and coming generations ought to thank him and do honor to his name.

It is not within the scope of these brief remarks to speak of Henry Barnard's labors in other directions. In the preparation of this report, in addition to the wealth of material to be found in the *American Journal of Education*, I have made free use of the reports of the Commissioner of Education, and particularly of the admirable sketch of the life of Henry Barnard by Rev. A. D. Mayo, published in a late report.

How much the influence of the strenuous educational life of Henry Barnard and his co-laborer, Horace Mann, reached and reaches beyond the borders of their states, no one can fully measure. There is no doubt, however, that all portions of the United States were affected by the labors of these great men. The question of the establishment of normal schools in Massachusetts began in 1835 and continued until the opening of the first school at Lexington, July 3, 1839, under the principalship of Rev. Cyrus Peirce. In 1839 Governor William H. Seward of New York recommended that "normal-school instruction be ingrafted on our public-school system," and in 1844 the first normal school was opened at Albany, with David P. Page as principal. In 1838 Superintendent Thomas H. Burrowes, of Pennsylvania, advocated the establishment of schools in that state for the education of teachers, in which should be given "a full and careful course of theoretic and practical instruction in the art of teaching." In 1855 the State Normal School at Millersville, Pa., began as a teachers' institute, and has continued without a break as

a normal school ever since. In 1857 the legislature of Pennsylvania passed a law somewhat similar to that of Rhode Island, which was passed a few years before, and which permitted the citizens of the state to put their private money into normal-school property. Unlike Rhode Island and many other states, the normal schools of Pennsylvania have been built largely by private funds, altho they are state institutions. Ohio about the same time began the agitation for state normal schools. In 1841 the secretary of state urged the legislature to establish normal schools similar to those of Massachusetts. The agitation then begun has kept up intermittently ever since, and has thus far resulted in the establishment of a number of purely private institutions whose main purpose is the education of teachers. Elsewhere the great movement in public elementary education, which included as an essential factor the establishment of state normal schools, was wonderfully stimulated by the labors of Henry Barnard.

A great leader like Henry Barnard is a great follower as well. Do you remember the young woman at Lucknow who heard the Scottish highlanders long before the others could hear them? A great leader hears the unconscious cry of the multitude before the rest of us. He sees the rift in the sky at the break of dawn before the rest of us. He tells the rest of us what to listen for, what to look for; and then we begin to hear and to see. Some of us must always look backward when going forward. We say, "History repeats itself," and wait and let it repeat itself. The leader never looks backward except to encourage his followers. He peers into the future with the eye of faith. His vision is clear because his faith becomes prophetic. We come and go, and thousands like us come and go. Henry Barnard and a few like him come and stay. To these men the teachers' profession owes a greater debt than it can ever hope to repay. The least we can do is to pay a tribute to their memory by carrying to full fruition the great reforms to which they gave their lives.

THE INFLUENCE OF HENRY BARNARD ON SCHOOLS IN THE WEST

NEWTON C. DOUGHERTY, SUPERINTENDENT OF SCHOOLS, PEORIA, ILL.

In order that a man may influence any movement, he must in some way come in contact with it. Such contact does not necessarily involve bodily presence among the men and women to be influenced. And yet the influence that one wields in the direction of human thought, and in the development of human character, depends largely upon his personality. In many situations this element is by far the mightiest. In the school, in the church, in the social circle, personality outranks all other sources of power. In all these relations we may say, as a rule, that the quality of the soul, the purpose that animates the man or woman, has

a more telling effect than intellectual culture. And yet there are ways in which, by the clear and convincing statement of significant facts, by the elucidation of principles, by the setting forth of vital truths, a powerful and lasting effect may be produced upon the thinking and motives of multitudes of men and women aside from the influence of personal character. But we must not forget that much of what we call personal influence may dwell in the books that one writes, in the printed addresses, and even in contributions to newspapers. By the thoughtful reading of the works of such writers as Wordsworth, Kingsley, and Longfellow, one may be brought into close relations with the personal qualities of the writer. The writer's noble aspirations and exalted ideals may impress us as if we were in the personal presence.

By outward personal contact Mr. Barnard wielded but little influence in the western states. He was president of the State University of Wisconsin for two or three years. But it will be no injustice to him to say that he did not in that capacity exhibit his most efficient power. His influence in the western states was mostly due to the educational literature that he made accessible to the people. And it may be further added that his own writings played a comparatively secondary part in the work to which we refer. This was not because his writings were of little worth, but simply for the reason that they formed a very small part of the literature which he distributed.

In order to understand the importance to the western states of Mr. Barnard's work, let us briefly examine the educational conditions existing in those states about the time when he began the publication of the *American Journal of Education*. This was not the first of Mr. Barnard's publications. Many reports of his had appeared from the year 1839 and later, and he had also been previously connected with educational journals. But the *American Journal of Education* was the chief work of his life. The first number appeared in 1855. At that time in the states west of the Ohio river very little progress had been made in the development of universal education. It may be said that in each of these states there were men and women who understood something of the educational needs of the country, and who were doing what they could to arouse upon that subject the communities in which they lived. Efforts were put forth to establish normal schools and teachers' institutes. Educational journals were started in various places for the purpose of enlightening the people and awakening their enthusiasm. But the success attained before the period to which we refer, namely, the year 1855, was not complete. Reports from the state of Ohio show that the average length of winter schools, taught by men, was $1\frac{7}{10}$ months per annum, and the average length of summer schools, taught by women, was $1\frac{7}{10}$ months. The wages paid to male teachers averaged \$23 per month, and to female teachers \$13. In the state of Illinois a public-school law had been passed in 1825, but for thirty

years it continued substantially a dead letter. In 1855 a new law went into operation, and from that date educational progress began. But it appears that as late as the year 1858 only thirty-eight counties in the state, somewhat more than one-third of the entire number, held teachers' institutes. The first public normal school began its work in 1857. This sluggishness in educational work seems surprising when we consider the efforts that had been made in the Congress of the United States and in the state legislatures. We remember that by the ordinance of 1785 the present system of townships was established in the great Northwest Territory. It provided that there should be preserved "the lot No. 16 of every township for the maintenance of public schools within the township." The next step was taken in the ordinance of 1787, in which it is declared that "religion, morality, and knowledge being necessary for the happiness of mankind, schools and the means of education shall forever be encouraged." These provisions were reiterated in the enabling act, passed by Congress April 18, 1818, by which the people of Illinois territory were authorized to organize a state government. The same provisions were adopted by the convention which formed the first state constitution. By the latter authority funds were also provided for higher institutions of learning. Would it not seem as if provisions like these ought to have stimulated the people to enthusiastic activity in the establishment and support of public schools? But, as already stated, the effect was otherwise. In many instances the lands appropriated by Congress for educational purposes were frittered away—sold for paltry sums. In many cases this was because the officials in charge did not foresee the value of these lands. But there is reason to suspect that, in some cases, it was the result of dishonest collusion with the purchasers.

Many reasons have been assigned for this continued failure to supply the means of education so much needed. It is reasonable to suppose that the comparative poverty of the people had some influence in this direction. The pioneer settler has many unfavorable conditions to meet. He is not surrounded with the comforts of life as men in older communities are. Hard work, and much of it, is required to supply him and his family with the necessities of life. It is claimed that on this account the early settlers in the northwestern states gave little thought to the question of education. It required all their energies to furnish their children with food and clothing. Their mental vision was narrowed, and their higher impulses were suppressed by the constant pressure of these grosser needs. But it is also urged, as an explanation of the fact which we have been considering, that a large majority of the early settlers of Illinois and some other western states had emigrated from states in which there was no adequate provision for universal education. As a historical statement, I think that this must be conceded to be true. Public schools were but poorly maintained thruout the country except in a few of the eastern states. Indeed, at the

beginning of the present century it may be said that in no part of the union were schools well supported and well patronized. The strenuous experiences thru which the country had passed in the establishment of its independence appear to have blunted the people's perception of the value of intellectual and æsthetic culture. And we have very good authority for asserting that the educational failures of the early settlers in the Northwest Territory were not entirely due to their poverty. In the year 1854 the secretary of state for Arkansas, who was also the superintendent of schools, declared in his report: "The great obstacle to the organization of common schools is not so much the deficiency in the means to sustain them, as the indifference that pervades the public mind on the subject of education."

In what has been stated, only a few illustrations have been given of the low conditions of schools in the western states at the time to which we refer. To make the whole case clear, to present an adequate picture of the entire scene, would require more space than we have at our disposal.

In view of the conditions to which we have referred, what were the educational needs of the western states about the year 1850? I think we may set aside the suggestion that the greatest need was money. In these states wealth was already largely developed. The magnificent fertility of the soil was beginning to be successfully utilized. Altho artificial means of transportation were as yet limited, altho as yet railways had done very little in furnishing outlets for agricultural products, the natural avenues were open. The great waterways could be utilized, and were utilized, for furnishing eastern markets with the products of the western lands. And altho the commerce between the East and the West, and consequently between the West and all the outer world, was limited at this time, there was enough of it to warrant a much larger expenditure than was made for the cause of education. According to the testimony, may we not say that the educational needs of the time may be classed under two heads? First, there was need of information as to what had been done elsewhere in promoting education. And, secondly, there was need that this information should be put in such form as to act as a powerful stimulus. The western people needed to be informed on the subject of schools, and they needed to be stirred to a resistless and successful activity. How admirably adapted was Barnard's *Journal* to supply both these wants! As one glances thru the vast aggregation of thirty-one volumes, he cannot fail to be impressed with the magnitude of the work represented therein. In the language of a distinguished educational writer: "The *Journal* is, in fact, a library of education in itself." In the first place, it gives information on the subject in all parts of the world. The history and methods of many of the most prominent schools in Europe and America are carefully set forth. Every volume of the *Journal* is made up of contributions from the ablest writers on educational topics in the United States and

elsewhere. The prevalent systems are clearly stated and illustrated. The philosophy of education is thoroly and ably discussed. There is also much in the way of practical direction to inexperienced teachers. The *Journal* is a mine of intelligence on these topics. But it is more than this. It is a source of inspiration. The period which the *Journal* covers was a period of intense and earnest thought, as well as of high aspiration, in regard to educational work. The questions were discussed with a serious energy. The contributors to the *Journal* did not write in order to exhibit their literary graces; the topics which they were discussing were to them grave and serious matters. They believed, and rightly believed, that on the right solution of questions which they were discussing would depend the perpetuity of our free institutions, and also the welfare of the human race. The educational literature of the time was marked by a high and inspiring ethical quality; it exhibited a profound sense of moral responsibility; and one of the effects was that it appealed to that which is noblest in the human character. The contributions to Barnard's *Journal* not only enlightened the understanding of men, but stirred their souls as well. There was not only clearness of head, but also warmth of blood. This is a point that is not always reached by the theoretical, hair-splitting discussions of modern times.

And what could be more perfectly adapted to the educational wants of the western country than this? For it must be understood that the western man is endowed with emotions as well as intellect. Cold logic is not enough for him. He likes to be stirred. He likes to read of the forces which have impelled men to heroic activities.

Viewed from this standpoint, Mr. Barnard made a valuable contribution to educational progress in the western states. We have spoken of the wielding of personal influence thru literature. That effect was produced, in this case, not alone by Mr. Barnard's reports and lectures, which were the product of his own mind; it was indirectly accomplished by all the high-grade literature which he spread before the country. And the effect was intensified by his personal history. In Mr. Barnard's day the time for great financial profits in educational work had not arrived. The great mass of teachers were compelled to be content with meager salaries, and educational publications were not, as a rule, financially profitable. Perhaps nothing in all the educational literature of the time so forcibly illustrates this proposition as the *American Journal of Education* itself. It was not a money-making enterprise; on the contrary, it was continually published at a loss. Mr. Barnard, who had something of a fortune of his own, which might have been largely increased if he had engaged in the practice of law, for which he was thoroly prepared, carried on this publication at a sacrifice. And the statement is made, on good authority, that his entire earthly possessions were devoted to this work. Here, then, was an example of a man who engaged in a work

which he thought essential to the progress of the race, a work which was greatly needed by the nation, without hope of pecuniary reward. A life thus devoted cannot fail of inspiring men to deeds of unselfish philanthropy.

We are not assuming that Barnard's *Journal* was read by all the school officers and teachers in the western states, or by any very large proportion of them. But it is one of the blessed results of the utterance of truth that it passes from mind to mind. A few men in the western states knew what Mr. Barnard was saying. Their minds were enlightened, and their enthusiasm was enkindled, by what they found in the *American Journal of Education*. By these, the truths, thus disclosed, were disseminated. They were reiterated in educational meetings, in teachers' institutes, in normal and other schools. As a result, the educational reformers were strengthened by them, and in the course of time a majority of the people at large accepted them, and the result appeared in the increase in the number and quality of schools, in the further distribution of educational intelligence, in the establishment of normal schools, in the improvement of schoolhouses, and in the willing supply of funds for all the expenditures involved.

*HENRY BARNARD'S HOME LIFE, AND HIS WORK AND INFLUENCE
UPON EDUCATION AS COMMISSIONER OF CONNECTICUT AND
RHODE ISLAND*

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Two generations have passed away since Henry Barnard, a young lawyer of twenty-seven years, consecrated himself to the work of educational reform in his native state. The apathy of the wealthy, the interests of the cultivated in numerous private denominational institutions, and the mismanagement of the "school societies," to which Connecticut had abandoned her common schools, all conspired to make the outlook for practical education, in the land of steady habits, a gloomy one indeed at the time that Henry Barnard was elected as a member of the state legislature.

Within one year he framed and pressed to passage an act to provide for the better supervision of the common schools. He immediately sought and secured the appointment as commissioner of common schools for Rev. T. H. Gallaudet, at that time one of the ablest educators of New England. Mr. Gallaudet could not see his way to the acceptance of this commission, and Mr. Barnard himself was unanimously chosen as the first school commissioner of Connecticut, and, tho loath to accept, he was finally persuaded to undertake the work.

He at once proceeded to learn by correspondence and visitation the

conditions existing in the schools, to awaken by public addresses and personal interviews with teachers, officials, and taxpayers, in every quarter of the state, an earnest desire for better schools, and to formulate plans by which the legislature and state board of education might accomplish the desired improvement. In the creation of an enlightened sentiment concerning the needs of the languishing public schools he was eminently successful. His personal devotion to the ministry of education, and his self-surrender to the work, made his naturally eloquent appeals irresistible. His perception of essential agencies for the successful accomplishment of school reform was evidence of the clear thought of one who had already declared that the cause of true education—the complete education of every human being without regard to the accidents of birth or fortune—seemed most worthy of all his powers, and, if need be, of any sacrifice of time, money, and labor which he might be called upon to make in its behalf.

The improvement of the teaching force, thru teachers' institutes; the return to popular administration of the school; the levy of adequate local school taxes; the building of schoolhouses with proper attention to light, warmth, ventilation, furnishing, and decoration; the establishment of school libraries; and the intelligent selection of improved text-books and superior apparatus, were the chief points to which he devoted his efforts. He was determined, as he declared in his great speech in advocacy of the school law of 1838, "that the common school should no longer be regarded as common because it is cheap, inferior, and attended only by the poor and those who are indifferent to the education of their children, but *common* as the sunshine and the air, because its blessings are open to all and enjoyed by all." In bringing this state of affairs to pass, he declared his purpose to enjoy the satisfaction of the laborer, letting who would enter into the harvest.

Within two years of his undertaking this work, Horace Mann declared :

The cold torpidity of the state soon felt the sensation of returning vitality; its half-suspended animation began to quicken with a warmer life; much and most valuable information was diffused; many parents began to appreciate more adequately what it was to be a parent; teachers were awakened; associations for mutual improvement were formed; system began to supersede confusion; some salutary laws were enacted; all things gave favorable augury of a prosperous career; and it may be further affirmed that the cause was so administered as to give occasion for offense to no one. All religious men had reason to rejoice that a higher tone of moral and religious feeling was making its way into schools without giving occasion of jealousy to the one-sided views of any denomination.

For years the work went bravely on, but, as it progressed, Mr. Barnard found that the influence of the "school societies," stung by the publication of reports setting forth the actual condition of the schools, had raised up a reactionary sentiment which was able to capture the machine of one political party and sweep the whole Barnard school code from the

statutes. Disappointed, but not embittered, by this action, which took from him the opportunity for which he had sacrificed so much, the devoted young leader immediately began the collection of materials for a history of education in the United States.

In October of the following year Rhode Island passed a law for the improvement of her public schools, and Governor Fenner, urging upon Henry Barnard that "it was better to make history than to write it," persuaded him to become the first superintendent of Rhode Island. The act constituting his office prescribed that he should "visit and examine the respective public schools in this state; ascertain the length of time each district school is kept, and at what season of the year; the qualifications of the respective teachers of said school; the mode of instruction therein; collect information of the actual condition and efficiency of our public schools and other means of popular education; and diffuse as widely as possible among the people a knowledge of the most approved and successful method of arranging the studies and conducting the education of the young, to the end that the children of the state, who depend upon common schools for instruction, may have the best education that those schools may be made to impart; and shall make a report to the legislature, with such observations and reflections as experience may suggest, upon the condition and efficiency of our system of popular education and the most practical means of improving the same."

Mr. Barnard proceeded to procure knowledge of the condition by visiting every school in the state, holding public meetings in every town, and securing reports from teachers and school officers. With this information in his possession, he realized that almost every evil of the Connecticut situation was reproduced in exaggerated form in Rhode Island; and he proceeded to report the Connecticut campaign with such good results that in two years both opposition and apathy were practically eliminated.

On December 12, 1845, Mr. W. H. Wells, for more than fifteen years a prominent New England teacher, wrote from Andover, Mass., to the *Boston Traveller* as follows:

Here, then, is a state which has completely reorganized its system of public schools and incorporated with it the best features of other states. During this period more than five hundred addresses have been delivered in the different towns, and nearly one-sixth of the schoolhouses have been either rebuilt or remodeled. Town, county, and state associations of teachers and friends of education have been formed, which have held more meetings in two years than the same number of similar institutions in Massachusetts held in five. The novel feature of an itinerating normal-school agency operating directly upon the several schools has here wrought out its most happy results. An educational tract has gone into every family in the state that takes an almanac; and a library of education has been established in every town for the use of teachers and school committees; to say nothing of the great variety of books and pamphlets relating to subjects of public instruction, which have been widely disseminated among all classes of citizens.

The superintendent has just closed a series of teachers' institutes through which a

large amount of knowledge has been imparted to more than half the teachers employed in the winter schools; and, what is still better, a zeal for improvement as individuals and as a profession has been inspired, which must accomplish still greater results. I have enjoyed the privilege of being present at two of these institutes and have formed a very high estimate as to their utility. I have attended at different times a variety of teachers' conventions and associations, but justice requires me to say that I never before received so much valuable instruction on the subject of teaching in the same space of time.

At about the same time Mr. Wells said in a personal letter to Mr. Barnard :

Teachers' institutes, as organized and conducted by you in Rhode Island, acting at once upon teachers, school officers, and parents, on the home and the school, is a new agency in local school work and professional improvement. The county conventions and associations which I have attended since 1830 accomplished no such results; the proceedings do not go so deep in any direction or on any one topic at a time, or reach out so far, and they leave no such intelligent, enthusiastic interest in the community where the meetings are held. Your institutes left the places where held in a red-hot glow. Your separation of practical professional work with teachers in your day sessions, from popular addresses to parents and the public generally in the evening, is most judicious. Your placing teachers, as well as your speakers and helpers, in the families of the place, where the work done and to be done was sure to be talked over, is a stroke of genius. Your educational tracts scattered broadcast before and after the meetings, your provision for educational addresses in all the neighboring towns during the week preceding and during the session of the institute, was inspiring work of the best sort. The whole thing to be appreciated needs to be seen and felt, and no teacher who has shared the enthusiasm will ever forget a Rhode Island institute.

For five years the good work went on with such fruitage that Dr. Mayo is warranted in saying that "nowhere in the history of popular education in the United States is there a more conspicuous example of making a new chapter in the history of education."

In 1849 failing health compelled Dr. Barnard to retire from office. By unanimous vote of both branches of the legislature, the gratitude of the citizens of Rhode Island was expressed. Every institute held in the state during the year after he declared his intention of retiring gave utterance to the loyal and appreciative feeling of the teachers themselves.

In response to a communication of the state association, transmitting a gift and memorial of his work and worth, Mr. Barnard said :

If, during the past five years, anything has been done to increase the facilities for individual and professional improvement enjoyed by teachers, and to raise the social and pecuniary estimation in which their services are held and rewarded; if any advance has been made toward the better organization and administration of a system of public schools, and the more thorough, complete, and practical education of the whole people, these results are the sum total of innumerable contributions, all of them as meritorious and many of them, I doubt not, more important than my own. Every teacher who has, with or without the help of books, institutes, and sympathizing friends, made his school better than he found it; every school officer who has aimed faithfully to understand and execute all the details in the local administration of the new system; every person who, by his voice, pen, vote, his pecuniary aid, or his personal influence, has contributed to the earnest awakening of the legislature and the people to the importance of this much-neglected public interest, and in favor of liberal and efficient measures of educational

reform, has labored with me in a common field of usefulness, and is entitled to whatever credit may be attached to a successful beginning of the enterprise.

Such is the nature of the ever-extending results of educational labor that, if a successful beginning has been made in any department of this field, no matter how small may be the measure of success, we should feel amply rewarded for our exertions, and, with love, hope, and patience in our hearts, we should hold on and hold out to the end. Whoever else may fail or falter, may every teacher in the state persevere until Rhode Island stands acknowledged before the world a model state for her wise system of popular education. Then will her workshops be filled with intelligent, inventive, and contented laborers; her cities and villages be crowned with institutions of religion, benevolence, and charity; and every home throughout her borders be made a circle of unending smiles.

The cause of true education, of the complete education of every human being, without regard to the accidents of birth or fortune, is worthy of the concentration of all our powers, and, if need be, of any sacrifice of time, money, and labor we may be called upon to make in its behalf. Ever since the Great Teacher condescended to dwell among men, the progress of this cause has been upward and onward, and its final triumph has been longed for and prayed for, as well as believed in, by every lover of his race. And although there is much that is dark and discouraging in the past and present condition of society, yet, when we study the nature of education, and the necessity and capabilities of improvement all around us, with the sure word of prophecy in our minds, and with the evidence of what has already been accomplished, the future rises bright and glorious before us. On its forehead is the morning star, the herald of a better day than has yet dawned on our world. In this sublime possibility and in the sure word of God, let us, in our hours of doubt and despondency, reassure our hope, strengthen our faith, and confirm the unconquerable will. The cause of education cannot fail unless all the laws which have heretofore governed the progress of society shall cease to operate, Christianity prove to be a fable, and liberty a dream.

After two years of rest, with health seemingly restored, he had the satisfaction of knowing that his early work in his native state had not been without its fruitage. In August of 1851 he was called to be principal of the New Connecticut State Normal School and state superintendent of public schools. At his installation Rev. Horace Bushnell said:

After encountering years of untoward hindrance here, winning golden opinions meantime from every other state in the republic, and from ministers of education in almost every nation of the world, by his thoroughly practical understanding of all that pertains to the subject; after raising into vigorous action the school system of another state, and setting it forward in a rich tide of progress, he returns to the scenes of his beginnings, and permits us to congratulate both him and ourselves on the prospect that his original choice and purpose are to be fulfilled.

During four years he repeated his success in Rhode Island, but again a lack of health compelled him to relinquish his leadership, amid the regrets of every friend of education in the commonwealth. Well might the *Connecticut School Journal* say:

We will never forget the generous and indomitable spirit which prompted him in the outset of his public life to plead the cause of the common school, without fee or hope of reward, before a cold and unwilling audience in the highest council of the state; which induced him to abandon a professional career, for which he had made a most costly and diligent preparation, and in which, steadily pursued, he was sure to win both distinction

and wealth ; which has enabled him to turn a deaf ear to the voice of political ambition, and to close his heart to the seductions of popular applause, so easily gained by one possessed with his power of oratory in the discussion of questions of temporary interest ; which has led him to decline positions of the highest literary dignity in college and university, that he might give himself up unreservedly to the cause of the common schools.

Altho the official labors of this great leader in both Connecticut and Rhode Island were completed before I was born, it was my great good fortune to know rather intimately the home life of Dr. Barnard during the last four years that he was spared to the world, and I shall always esteem the memory of his personal friendship as one of the abiding benedictions of my life. Dwelling during these years in the city of his nativity, in the house which welcomed his birth at the close of the first decade of the nineteenth century, and from which his mortal remains were borne a few months before the opening of the twentieth century, the thought of his later life was ever keenly sympathetic with the best spirit of the advancing age. The loss of his wife, a native of the city in which we meet this evening, and, some years later, the death of a beloved son, who had already given evidence, in a brief but brilliant career at the bar of this city, that he inherited the talents of his distinguished father, saddened much the closing years of his life. But he, who had given himself so generously to two generations, was rewarded and cheered by the rare devotion of his two daughters, Emily and Josephine Barnard, who were the constant companions of the happiest old age it has ever been my lot to know. To these two young women he seemed in manner at times as much a gallant elder brother as a loved and loving father. Permitted to visit him by the hour in his parlor with other friends ; in his den, to which only a chosen few were admitted ; at his table, where he was to the last the courteous host ; in the fine old garden, whose fruits were the product of the intelligent toil which became one of his regular pastimes ; in the library, amid the rarest collection of pedagogical books in all America, I have been a charmed listener as he spoke of the work the world had done and was doing. He had little to say of his own work, but much of that of his contemporaries, and, as I listened to him, I wondered that his song was ever one of praise. He seemed to remember only the good endeavor and the successful achievement of a vast number of his co-laborers in his numerous and widely separated fields of labor. I recall that, as I met him first, I went into his presence with a feeling of intense reverence, evoked by the knowledge of the great work he had done. This feeling was reinforced by his distinguished and venerable appearance, but I came away rather blaming myself for having been betrayed into the attitude of colleague and equal. As I watched him frequently thereafter, I discovered that this was characteristic of his intercourse with men and women, young and old. He made you forget age, rank, and station,

found a vital common interest with you, and impressed you as a friend of everyone whose heart responded to a noble impulse. His life and work shed luster on the family and state which produced him, liberalized and dignified the cause which he served, and made his name one of the very foremost in the history of popular education in our country.

HENRY BARNARD AS AN EDUCATIONAL CRITIC

FRANCIS W. PARKER, DIRECTOR OF SCHOOL OF EDUCATION, UNIVERSITY OF CHICAGO

The common school is by far the most important institution ever devised by man—most important, because any and all other institutions together have not as great influence upon the growth of our republic, and because the education of the masses is the one hope of the future. Very young in years, exceedingly crude in its beginnings, dependent upon traditions that are the product of other times and circumstances, opposed by the strongest conservatism, it has made its triumphant way up to the beginning of the new century. Never before in the history of the world has there been so much thought and discussion on this topic, and such rapid, real, genuine progress in education. In order to realize this, we have but to note that New York city spends twenty millions this year for its children, and Chicago eleven millions; that books upon education are issued from the press in rapid succession; that the demand for educated, trained teachers is steadily growing. The common school is the child of the people; nourished and supported by the people, its virtues and its faults are in the people. It is the one great central product of democracy. Its history has never been written, except in part, in local sketches and statements of general facts; but the time has fully come when every teacher in the common schools needs the reinforcement of a genuine, truthful history of the American school system. It is high time for us to look back to the beginnings as we never did before, to learn "in what a forge and what a heat were shaped the anchors of our hope." We should know the patriot heroes, founders, and promoters of the common-school system. They are many. Each state has its heroes; each movement its courageous supporters. Of the many heroes of education there stand out two imposing figures—Horace Mann and Henry Barnard. They both entered into the work under the same ideal. They, more clearly than others, saw that a republic is an impossibility without education, intelligence, and morality. Each gave up hopes of future greatness and threw himself, body and soul, into the work which he believed to be intrinsic in the growth of the new country.

There are two distinct classes of educators: those who believe in the past, study its traditions, and try to prove that the education that has

been—improved in many points, but kept as a unit in principle—is sufficient for the future ; and those who believe that we are marching along the endless pathway of unrealized possibilities of human growth—those who, in a word, believe that all that education has yet done, with its principles and methods, its reformers and its organization, is but a crude step toward that which must be. The great incentive of the latter class is the needs of society. They believe that the inner development of the human soul in righteousness is the one purpose of education.

To this class of educators belong Horace Mann and Henry Barnard. They began with an awful scantiness and meagerness of resources ; they met with sullen indifference as to common education on the part of the people ; but they had sublime faith in the cause and in the people. Mann and Barnard both realized how little there was to begin with. Both cried out for means, for books, for men, for self-knowledge of education. The work of Horace Mann was to study the situation in Massachusetts thoroly, to arouse the people to the belief which he so strongly held, and to change conditions from chaos to organization. The legacy he has left us, the great product of his genius, is his twelve annual reports, which may be read now by every teacher in the country with exceeding profit. Henry Barnard's great work was to introduce to the people of America the best that had been done in education in all parts of the world and to report progress. We know how little we received from our mother-country. The work of the schoolmasters of Germany, the land of education, had scarcely affected our education in the time of these two great educators. Horace Mann, it is true, brought back from Germany the ideas that aroused the bitter opposition of the Boston masters ; but it was Henry Barnard who introduced to English readers Comenius, Ratich, Sturm, Fellenberg, Pestalozzi, Diesterweg, and Froebel. He gave the history, up to his time, of the evolution of education in the United States, and biographies of the men and women to whom we owe our beginnings. Henry Barnard sought for the best in all languages, and his genius enabled him to find what the teachers of his time needed, and what, indeed, the teachers of today need. It is acknowledged that there is no cyclopædia, no other work upon education in the world, that offers so much for all-around study as the *American Journal of Education*. It is a marvel of selection and a wonder of completeness. It would be difficult to name any good work ever done in education that is not included in this wonderful journal. Turn over the leaves of the *Connecticut School Journal*, Vol. I, published in 1838. I doubt whether there is any school publication today so rich with ideas and yet so adapted to the situation of that time. Gallaudet urges the employment of women as teachers. Fellenberg gives his ideas upon the Bible in the schools. The first place in the volume is given to the education of teachers. School laws are discussed, and improvements in organization suggested. Reports

on all educational institutions in America—common schools, academies, universities—are contained in the volume. The first volume of the *Connecticut School Journal* was published one year after Horace Mann took the secretaryship of the Massachusetts board of education. Barnard continued the immense task in the *American School Journal*. The thirty-one volumes published are replete with information concerning the schools of all the world. President Bache reports on the schools of Prussia, Hanover, Saxony, France, Egypt. The best the world had to offer in educational literature was critically chosen. Henry Barnard's incentive was the tremendous necessity for intelligence in regard to education. His guide was the feeling in his soul of the absolute necessities for democratic growth.

Dr. Barnard did not select and collate by hazard or chance the best educational literature the world had to offer. He was in a broad and deep sense an all-around educator. He comprehended principles and their application to school-teaching and training. He had a ready and clear insight, a practical discrimination of right and wrong, of the false and true in education. He could trace devices to their origin and beginnings. In crudeness he discovered the right tendencies, in over-elaboration the wrong motive. One of the most profitable days in my life was the day I spent with Dr. Barnard in visiting schools. The best I can say of myself is that I was hungry to know and anxious to discard the useless and to select the useful. My guide was the keenest, truest critic of school work I ever knew, and I have been fortunate in knowing many. It is easy to condemn that which is wrong, but difficult to appreciate right motive, which should be the basis of all criticism.

We owe to Henry Barnard profound gratitude for a vast wealth of educational literature. We should cherish as a priceless inheritance his all-controlling love for a free government, his devotion to a holy cause in its inception. As the needs of the republic were his guide and incentive, so let them be ours in the presence of the ever-increasing necessities of human growth.

ESTABLISHMENT OF THE OFFICE OF THE COMMISSIONER OF EDUCATION OF THE UNITED STATES, AND HENRY BARNARD'S RELATION TO IT

WILLIAM T. HARRIS, UNITED STATES COMMISSIONER OF EDUCATION,
WASHINGTON, D. C.

As members of the National Council of Education, we are assembled this evening to pay our respects to the memory of Dr. Henry Barnard. By common consent, Dr. Barnard ranks as the second of the two great educational heroes which America has furnished. Other members of the Council have prepared papers on his work as a critic of education, on his

influence in the establishment of normal schools in the country, on his influence upon the schools in the western states, and finally on his home life and his influence upon education in Rhode Island and Connecticut. To me has been assigned the preparation of a paper on the establishment of the office of United States Commissioner of Education and Dr. Barnard's relation to it.

The discussions relating to the life of Henry Barnard must center about his great work in the preparation of the *American Journal of Education*, which may be said to have practically absorbed the energy of his life and to have used up his financial resources. Dr. Barnard makes, and will make, in our educational history a heroic figure thru his devotion to this one great purpose, namely, the preparation of a series of volumes containing all that is solid and valuable in the history of education. I think it was said by Horace Mann, in reviewing his own labors, that the greatest need existing, at the time when he left his work in Massachusetts, was the publication in a convenient form of the literature of education. Certain it is that Henry Barnard was early impressed with the need for such a publication, and took it upon himself as his life-work to prepare it and offer it to his countrymen.

I think that whatever he undertook in other lines of education — and the list of items in this field is certainly an extensive one — was felt by him to be subsidiary to this one great purpose of his life, namely, to enlighten the teachers and directors of education thruout the United States by giving them access to a complete record of the history of education in all ages and countries. When Congress, in 1867, passed an act establishing a Bureau of Education, it was quite natural that the name of Henry Barnard should be mentioned to the president as the fit man to fill the position of Commissioner of Education. Dr. Barnard would naturally think of his fixed purpose to provide educational literature, and it would occur to him at once that here was an opportunity providentially thrown in his way to take up a national work which could best be promoted by the same labors that he had undertaken as a private individual and supported from his private fortune.

I think that in forecasting the most important lines of usefulness for the newly established Bureau of Education he foresaw that the preparation of volumes containing the history of educational experiments, the discussions of educational reformers, the statistics of national systems of schools, and the biographies of great teachers would furnish the best material for a long series of official reports. During the three years (from March 14, 1867, to March 15, 1870) in which he held the office, he seems to have been maturing his plans for this line of work and awaiting opportunities in the form of resolutions by Congress calling for reports on special themes connected with the promotion of schools in the nation.

His first opportunity was furnished by the call on the part of Congress for a special report of the Commissioner of Education on the condition and improvement of public schools in the District of Columbia. This work was completed and submitted to the Senate in June, 1868, and again submitted to the House two years later, namely, in June, 1870, with additions. Three thousand copies of it were printed by the government printer in 1871. The act calling for it was passed March 29, 1867, fifteen days after his appointment as commissioner. This book of 912 pages forms the chief monument of Dr. Barnard's career as Commissioner of Education. It begins with an introduction by himself; this is followed by a special report of Franklin B. Hough (31 pages), and next comes the chief article in the shape of a compilation of the statistics of the schools in the states and cities of the country (pp. 44-144). There are five appendices. The first appendix gives an account of the proceedings in the establishment of a permanent seat of government in the United States. The second appendix contains a full discussion of the legal status of the colored population in the District of Columbia, Virginia, Maryland, Alabama, Arkansas, California, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, and Kentucky. The third appendix contains an article on illiteracy in the United States, prepared and illustrated by Dr. Edwin Leigh. The fourth appendix contains an account of art instruction in the country. The fifth appendix contains an account of public instruction in the cities of Germany, and a reprint of the report of Fraser on American schools; a brief statement of the course of study in Chicago, Philadelphia, Cincinnati, New Haven, Springfield (Mass.), New Bedford, Boston, New York city, St. Louis, and Louisville; and a table showing the salaries of teachers in the several cities.

The second opportunity of Dr. Barnard came with a call of the House of Representatives for a report on technical instruction. The first copy of the manuscript, which was not complete, was prepared in pursuance of an order of the House approved January 19, 1870; but it was never printed. A so-called second edition was published in Dr. Barnard's *American Journal of Education*.

What Dr. Barnard called the second edition (on p. 9 of Vol. XXI of his *American Journal of Education*) is not a second printed edition, but only an edition revised from the manuscript which he had prepared in compliance with the order of the House of Representatives. He says distinctly:

The resolution of the House . . . to print 5,000 copies for distribution . . . did not reach the Senate in time to be acted on before the close of the session. No subsequent action having been taken by the Senate, House, or Office of Education, to give circulation to a document which, etc., . . . the following edition is issued for subscribers to the *American Journal of Education*.

So far as the ordinary usage of the word "edition" is concerned, this

is, therefore, the first and only edition of the work, and it appeared in July, 1871, as Vol. XXI of the entire series of Barnard's *Journal*, and as Vol. V of what he called the "National Series." Dr. Barnard had evidently intended his "National Series" to contain his reports as commissioner.

The contents of this work on technical instruction are as follows :

An introduction (pp. 17-32) on the progressive development of schools, and practical courses of instruction in science.

Part I, systems and institutions of technical instruction (pp. 33-800): (1) Austria, (2) Baden, (3) Bavaria, (4) Brunswick, (5) German free cities, (6) Hanover, (7) Hesse-Cassel, (8) Hesse-Darmstadt, (9) Mecklenburg, (10) Nassau, (11) Oldenburg, (12) Prussia, (13) Saxony, (14) Saxe-Altenburg, (15) Saxe-Coburg-Gotha, (16) Saxe-Meiningen, (17) Saxe-Weimar, (18) Württemberg, (19) France, (20) Belgium, (21) Holland, (22) Denmark, (23) Norway, (24) Sweden, (25) Russia, (26) Switzerland, (27) Italy, (28) Spain, (29) Portugal.

A prefatory note prefixed to the edition of this work in Vol. XXI, 1870, throws more light upon the plans of Dr. Barnard with regard to the reports of the National Commissioner of Education. He states that in the original plan

This document [namely, report on technical instruction] would have constituted Part IV of a comprehensive survey of national education in different countries which he [Dr. Barnard] had commenced in 1854 in view of a thorough discussion of the condition and improvement of public instruction in the United States.

Parts I and II of the survey of national education in different countries were to treat of elementary and secondary education, as follows:

Part I, in the German states, and in Belgium, Holland, Denmark, France, Norway and Sweden, Russia, Turkey, Greece, Italy, Spain, Portugal, Great Britain.

Part II, in the American states, with a comparison of the systems and condition of public schools in the United States with those of more advanced states in Europe.

Part III, in universities, colleges, and other institutions of superior instruction.

Part IV, professional classes and special instruction, including schools of theology, law, medicine, teaching, agriculture, commerce, engineering, navigation, mines, technology, etc.

Part V, supplementary instruction, including libraries, lectures, evening schools, etc.

Part VI, societies, museums, and collections for the promotion of education, science, literature, and the arts.

In the prefatory note Dr. Barnard states that the information relating to systems of elementary and secondary instruction had been collected and prepared for publication in the office of the Department of Education, and that it would be communicated in a few days to the secretary of the interior, with a plan for its speedy completion and publication.

As we read over this conspectus, we cannot help seeing that Dr. Barnard had begun to form a noble ideal of the work of the Bureau of Education (or "Department of Education," as it was named in the first law of Congress which organized it).

Dr. Barnard sent in his resignation as Commissioner of Education, to take effect March 15, 1870. His successor, General John Eaton, endeavored as far as possible to realize in the conduct of the office the ideas of Henry Barnard, and to incorporate in them such new features as recommended themselves from time to time. He began from the first to lay much stress upon the collection of statistics of the institutions and systems in the United States, showing their actual working results. This direction given to the report by General Eaton has been followed subsequently with somewhat increased emphasis. But in the administration of Colonel N. H. R. Dawson, my predecessor, an attempt was made to return more nearly to the ideas of Dr. Barnard by the preparation and publication of a series of circulars of information giving a history of the founding and conduct of the colleges and universities in the several states. The publication of this series has continued to the present date, and is now (in 1901) nearly completed.

At my request, General Eaton has written out for me a brief account of Dr. Barnard's connection with the Bureau of Education, which I will now read :

WASHINGTON, D. C., May 29, 1901.

SIR :

In reply to your request for "a brief account of Dr. Henry Barnard's connection with the Bureau of Education, mentioning the devices which he invented that came down to his successors," it is difficult for me to answer in full. My indebtedness to him personally was very great, but how much of this indebtedness came to me thru the bureau, and how much thru his writings and other works previously, and from personal acquaintance with him, it would perhaps be impossible to relate. His publications I had studied, beginning with the period in which he was connected in one way or another with Dr. Absalom Peters, Superintendent Randall, Dr. Wilder, and Professor N. A. Calkins, in publishing the *American Journal of Education* and the *College Review*, in the fifties, before the *College Review* was dropped from the title. At different times also I enjoyed opportunities to study on the ground what I could see of his administration of state systems, both in Connecticut and in Rhode Island; and I knew how he had influenced educational efforts in Charleston, S. C., in New Orleans, and elsewhere in the South. Indeed, I knew that he had suggested to the secretary of the department the taking of illiteracy in the census when that item was first included. Altho I had been acquainted with the work of Horace Mann while a teacher in Massachusetts schools in different places, perhaps I knew more of that period of educational revival thru Dr. Barnard in which he had been so prominent. I had gathered what I could from his trip to Europe, and of his labors as president of the university at Madison, Wis., and at St. John's College at Annapolis. To me he seemed to be the most eminent man at the time in the country in the knowledge of educational literature, and I felt great misgivings when I was called by General Grant to become his successor.

While I was Commissioner of Education I had visited him as state superintendent of schools, and had drawn upon him by letter. How much I had received from him in these various ways and how much came to me thru his efforts in the bureau, I repeat, it will be difficult to state. As early as 1854 he had made a movement for the establishment of a central office for educational information.

In response to a petition from a body of educators, especially made up of state and city superintendents of schools, prepared and presented by Hon. E. E. White, thru General

Garfield, Congress had passed an act, approved March 2, 1867, establishing an independent Department of Education, to be conducted after the manner of the Agricultural Department, as it was administered at that time, with a commissioner at a salary of \$4,000, and a group of clerks. Dr. Henry Barnard was appointed to organize the department, and entered most earnestly upon the work. In time he encountered opposition in Congress. At the end of two years the department was reduced from its independent position to that of a bureau in the Department of the Interior. One thousand dollars was taken from his salary, and the clerical force reduced to that of two of the lowest grade with a salary of \$1,200 each, making the salary of the commissioner what it has remained to July of this year, \$3,000; from which time the amount is to be advanced to \$3,500.

On handing me the keys of the office the doctor informed me of his trying experience in securing quarters for the office; for it had been moved from place to place without his approval. There was belonging to it no library, excepting a small number of city and state reports. The publications in his possession, in a separate room, had come to him in his capacity as an editor, and were his private property. Later, as appropriations warranted, with the approval of the secretary of the interior, these were purchased, their value having been estimated by the librarian of Congress, A. R. Spofford, Esq., and others. He spoke somewhat specially of the difficulty of securing the passage by Congress of a resolution to print, but indicated that he had made a report May 30, 1868, to the Senate, which in July, 1868, had been ordered printed by the Senate separately to the number of 3,000 copies. The same resolution of the Senate included authority to print a like number of copies of the special report on the District of Columbia, prepared by him on the order of the House of Representatives. He also indicated to me the substantial preparation for printing of other material. Immediately, with the hearty approval of the president and of the secretary, Hon. J. D. Cox, previously obtained, I prepared a letter recommending its printing at once, which the secretary forwarded in due form with his official recommendation. Later, in order to facilitate the use of these letters for urgency among members of Congress, they were printed. A resolution to print this material passed the House, but did not pass the Senate, and thus our efforts failed; but the material prepared afterward appeared in the *Journal*, and the bureau, as far as possible, aided in its distribution. Later the bureau furnished Dr. Barnard copies of its reports to supply the place of one number of the *Journal*, thus giving his subscribers information of the condition of education in the United States.

This *Journal*, it may be remarked, is his monumental work. Its publication absorbed his fortune and impoverished his last years. Thus he made his greatest contribution to the bureau and to other educational agencies. This failure to secure a resolution to print left the doctor and myself both in a very trying situation. If the office could not print, it must fail. Who was so well prepared as my predecessor, by long experience in educational literature, to offer for print what would be valuable for the country? This compelled me to study the situation, and I found that there were those among the school superintendents of the country not ready to answer questions and furnish the necessary information which the department needed; others claimed that it would meddle with their rights. Some pointed out the difficulty arising from the fact that there was no uniformity of dates in the reports of state and city systems, and of educational institutions; others still fell back upon the fact that there was no authority given the bureau but that of using such information as was freely accorded to it.

The plan of work, as unfolded by reports, and especially by the carefully prepared circulars printed by Dr. Barnard, was most comprehensive and seemed to leave little to be desired. What could be done? I inquired extensively among those who appreciated the importance of the office. In one of the reports of the state of Kentucky there will be found a portion of a statistical report copied from material obtained from Dr. Barnard and gathered by him. It was incomplete, and therefore it did not satisfy his judgment

to use it, but its publication thus furnished evidence of the struggle he had made to get information which would satisfy the demands of Congress.

Of his devices, tables of statistics, abbreviated texts, the issue of periodical circulars, and the methods which he proposed for furnishing information to persons and officers, I had enough knowledge to lead me to value them most highly.

As county and city teacher I had been trained in the tabulation of school reports; as city superintendent of schools I had devices for the tabulation of data to enable me to see the situation of each school in each week's experience; in order to study the relation of education to crime I had collated the statistics of jails in Ohio, and as state superintendent of schools I had been called upon to prepare a complete system of recording and reporting attendance and finance; yet I could not see how his devices and methods could be essentially improved in form. What could be better? I determined in some way to find a method of securing publication. I was sure the reports of the office would have been enriched if they could have included his personal reminiscences of the progress of educational efforts, his long and varied experience, together with his alert editorial watchfulness of this progress, as it may be termed, which made his memories extremely valuable. But I could not obtain them for publication by any offer of compensation by the office.

After a few months of experience and consultation, material for a circular was submitted to the secretary of the interior and its publication approved with a measure of hesitancy. Less than eight months after my appointment, material for an annual report was submitted and published, with all its imperfections, substantially within the lines and forms adopted by Dr. Barnard, and in accordance with the forms required by law.

Of his relation to the shaping of the work of the office I might say perhaps more specifically of his plans and devices: (1) He gave his utmost influence to the establishing of the bureau; (2) he sought to make reports which would be truly national; (3) he sought most carefully to devise valuable forms for statistics and abbreviated statements; (4) he began the publication of circulars giving information in regard to miscellaneous educational topics; (5) he enforced the national obligation to education; (6) he emphasized the need of universal education; (7) he would make the bureau enforce the universal relation of education to all the details of man's improvement; (8) he would make it understood that the laws of education in their relation to man's welfare were the same to all races; (9) he would draw illustrations of educational processes from all nations and peoples; (10) he sought to stimulate improvement by using both the historical and comparative methods, setting over against each other different years and different institutions and systems, by the publication of facts.

Indeed, it will be hardly possible for a national office of education to find anything appropriate to publish which is not included in the plans of Dr. Barnard as touching education and its relations.

In preparing this statement, I may add, I have consulted with two of the clerks, of whom one was a translator employed by Dr. Barnard, and also with Hon. George S. Boutwell, a surviving member of the committee of the House of Representatives which proposed the organization of the department. However unsatisfactory this statement, I can hardly make it more definite without quoting Dr. Barnard's language more at length.

Very respectfully yours,

JOHN EATON.

I have collected from the records of the *Proceedings of the National Teachers' Association*, of the *National Superintendents' Association*, and from other sources such items as relate to the conception of the National Bureau of Education, as follows:

Appendix A.—A letter addressed by the secretary of the American Institute of Instruction to John D. Philbrick, Esq., January 4, 1851, informing him of his appointment as chairman of a committee to petition Congress to establish an educational department at Washington.

Appendix B.—(a) Extract from an address by Daniel Read, *Proceedings of National Teachers' Association*, at Cincinnati, 1858 (pp. 43, 44).

(b) 1859. *Proceedings of National Teachers' Association*, Washington, 1859. On motion of Rev. Dr. McJilton, it was resolved that a committee of three be appointed to memorialize Congress in relation to the establishment of a national agency, thru which the educational statistics of the several states and territories may be collated and distributed thru the country.

(c) 1860. Extracts from an address by J. W. Bulkley, National Teachers' Association at Buffalo (p. 24), recommending that Congress be asked to inaugurate a department of national public instruction.

Appendix C.—(a) *Proceedings of National Teachers' Association* for 1863 (p. 46), showing that Professor Noble Butler, of Kentucky, read an essay in 1863 recommending the establishment of a National Bureau of Education by the federal government.

(b) *Proceedings* for 1864 (p. 143), showing that Professor S. H. White, of Illinois, read an essay on the same subject, and offered a series of resolutions.

(c) *Proceedings* for 1865 (p. 220). Professor James S. Hart, of Philadelphia, brought in resolutions recommending a memorial to the president and Congress for the establishment of such a bureau.

(d) Previous to the action of Professor Hart's resolution, Superintendent A. J. Rickoff, of Cleveland, O., read a paper on the subject showing the important services that such a bureau as was proposed would accomplish for education (p. 223, same *Proceedings*, 1865).

(e) The names of the persons appointed to memorialize the president and Congress are given in the volume of *Proceedings of the National Teachers' Association* published in 1866, and include members from ten different states.

Appendix D.—(a) A resolution adopted in 1866 to appoint a committee of five by the National Teachers' Association (*Proceedings* of 1865, pp. 305-7), to co-operate with the committee of the national superintendents.

(b) The report on the National Bureau of Education was read by Dr. E. E. White. Resolutions introduced by E. E. White, chairman (at the meeting of the National Association of Superintendents, 1866).

(c) Resolutions approving the Department of Education which had been established by the act of Congress in 1867, in pursuance of the recommendations of the committee above named, Dr. E. E. White, chairman.

*Appendix E.—*An address by Dr. E. E. White, commissioner of common schools of Ohio, February 7, 1866, on the subject of a National Bureau of Education.

*Appendix F.—*From Barnard's *American Journal of Education*, Vol. XXI, 1870, p. 5.

Prefatory note, on report on technical schools and special instruction in different countries, printed in answer to a call January 19, 1870, from the House of Representatives.

*Appendix G.—*Speech of James A. Garfield on a National Bureau of Education.

*Appendix H.—*Dr. Barnard's plan of a national agency for the United States to advance education (from Vol. XXI of the *Journal of Education*).

*Appendix I.—*Dr. Barnard's plan, in 1862, for a new series of the *American Journal of Education*, published in Vol. XXI.

*Appendix J.—*From Dr. Barnard's préface to his *American Journal of Education* for 1856, explaining the history of his plan.

APPENDIX A

LYNN, January 4, 1851.

DEAR SIR:

At a meeting of the officers of the American Institute the following vote was adopted:

Voted, That a committee be appointed to consider the expediency of petitioning Congress with reference to the establishment of an educational department at Washington, and that the following gentlemen compose this committee, to wit: Messrs. J. D. Philbrick, Boston; S. Adams, Boston; D. P. Galloup, Salem; Jacon Batchelder, Lynn; T. Cushing, Jr., Boston.

The committee to report at the next meeting of the officers.

Yours truly,

(Signed) JOHN BATCHELDER,
Recording Secretary.

JOHN D. PHILBRICK, ESQ.,
Chairman of the committee.

APPENDIX B

(a) 1858.—Extract from address by Daniel Read, *Proceedings of National Teachers' Association* at Cincinnati, 1858 (pp. 43, 44):

"The subject of a National Bureau of Education, to be connected with the Department of the Interior at Washington, has often been spoken of, and urged, as worthy of congressional legislation. Hitherto it has not met with that favor which its friends believe it deserves, especially from that portion of our fellow-citizens who are jealous of anything like a centralization of power, and who believe that all legislative power, upon the subject of education, belongs to the several states. While we believe that there is a

work which might be legitimately and more effectually performed by such a bureau, and that it has quite as much claim for government support as that of agriculture, yet we believe that, for the present at least, the wisest and most effective policy is to rely upon the states and voluntary effort for the accomplishment of the noble objects proposed thereby. We believe, however, in common with some of the wisest and most considerate friends of education, that a special effort should be made to establish at our national metropolis a *central and national educational agency*, by the aid of which more efficiency and uniformity of character may be secured in the educational movements of our country, and a library of educational books and publications, collected from every part of our own country and the world. Such an agency would greatly aid in giving a nationality of character abroad, and furnish the means for the publication of a national journal of education, which would be the means of spreading educational intelligence to every part of the civilized world. To carry out such a *grand central agency* successfully would require funds and effort, which could readily be secured, if the advantages resulting therefrom could be brought to the comprehension of the very many liberal-minded men of wealth in our country.

"This is a great and noble work, and it will require great and noble efforts to accomplish it; but do I overrate the ability and efficiency of this association when I say I believe it can accomplish it? Are there not men of means who would be willing to contribute largely for so noble a purpose? And are there not men of the required talent to carry forward the work? Would not our profession be the gainers in the end, if we were to take the whole responsibility? If we should undertake it in real earnest, we could not fail to receive sympathy and aid.

"One feature of this agency is so important as to be needed at once. I refer to a national journal of education, which, without interfering with, or in any measure superseding, the many state educational journals, will collect and embody such educational matter of general interest as its central location and access to the best means of information will bring within its reach. Every teacher should receive, read, and pay for the educational journal of his own state, if there is one, which, with a properly conducted national journal, would put him in possession of such information as every teacher ought to possess. There is a journal already established by private enterprise, and in the hand of a gentleman who is in every way qualified to conduct it, and which, perhaps, might be made to serve our purpose, in connection with the plan of its proprietor. I refer to the *American Journal of Education*, under the direction of Hon. H. Barnard, of Hartford, Conn. The invaluable matter contained in this journal, and its high character, claim, not only the confidence, but the support, of every teacher and friend of education who would be well informed. To those who have carefully read it no commendation is needed, for it speaks for itself, as it affords such information as can be obtained nowhere else."

(b) 1859.—*Proceedings of National Teachers' Association*, Washington, 1859. Mr. Valentine offered the following resolution (p. 4):

Resolved, That a committee of three be appointed to confer with the honorable the secretary of the interior, to ascertain what additional statistics in relation to the subject of education are desirable and feasible to obtain by means of the approaching national census.

The resolution, having been discussed by Messrs. Valentine, McJilton, of Maryland; Smith, of Indiana; Z. Richards and Dennis, of the District of Columbia; and Roberts, of Pennsylvania, was adopted. The committee appointed under the above resolution was: Messrs. Read, of Wisconsin; McJilton, of Maryland; and Starke, of Missouri.

1859.—On motion of Rev. Dr. McJilton, it was resolved that a committee of three be appointed to memorialize Congress in relation to the establishment of a national agency, thru which the educational statistics of the several states and territories may be employed and distributed thru the country. The committee under this resolution was the same as under the preceding.

(c) 1860.—From address by J. W. Bulkley, National Teachers' Association at Buffalo (p. 24): "It is by creating and diffusing an intelligent public sentiment in relation to our cause, first in our own immediate locality, enlarging from day to day, till the circumference shall embrace the circuit of the states individually, and the still more glorious circle of the union. With such a public sentiment as this we may, with confidence of success, present our cause to Congress, and ask for the inauguration of a Department of National Public Instruction. With such a department, having the necessary appliances, and an intelligent and efficient head, we can hardly estimate its power and influence."

APPENDIX C

(a) 1863.—(*Proceedings*, p. 46.) "A National Bureau of Education Should be Established by the Federal Government." Assigned to Noble Butler, Kentucky, for discussion at next meeting.

(b) 1864.—(*Proceedings*, p. 143.) Professor S. H. White read an essay entitled "A National Bureau of Education," and offered the following resolutions:

Resolved, That, in the opinion of this association, the educational interests of the country would be greatly advanced by the establishment of a National Bureau of Education.

Resolved, That a committee of three be appointed, whose duty it shall be to secure, if possible, the establishment of such an agency at Washington during the next session of Congress; and also to report the results of their action at the next meeting of this association, with their views upon the subject of "A National Board of Education and the Appointment of a Secretary of Public Instruction."

Mr. Z. Richards moved their adoption, and, after a discussion by Messrs. Richards and Barnard, they were adopted, and Messrs. Barnard, Richards, and White were appointed the committee.

(c) 1865.—(*Proceedings*, p. 220.) Professor J. S. Hart, from Committee on President's Address, read a report, accompanied by the following resolution:

Resolved, That a memorial be prepared to be addressed to the president of the United States and to the two houses of Congress, expressing the strong convictions of this association in regard to the necessity of having in every state a system of public schools for all classes, in order to the perpetuity and the right working of our political system; and expressing also the wish and the hope that the general government will do whatever it can rightfully and properly toward inducing the establishment of such a system of common schools in those states where they do not exist.

Resolved, That this association commend to the favorable consideration of the general government the organization of a Bureau of Education, for the purpose of collecting and publishing educational statistics, and of making suggestions for the advancement of popular education in the several states.

Resolved, That a committee of five be appointed to carry the foregoing resolutions into effect, and that the president of the association be chairman of said committee.

Laid on the table until after the reading of a paper on the same subject by Professor A. J. Rickoff.

(d) 1865.—(*Proceedings*, p. 223.) The resolutions of Professor Hart, of New Jersey, were taken from the table, when Mr. Rickoff offered the following additional resolutions:

Resolved, That the committee above provided for be instructed to appoint one of their number, or such other person as they may deem best, to devote his entire time, so long as to them may seem desirable, in such labor as may be necessary for carrying out the wishes of the association as expressed in the above resolutions.

Resolved, That a committee of three from each state represented in the association be appointed, whose duty it shall be to circulate petitions among the people of their respective states, praying Congress to establish a Department of Education, and to collect funds for the payment of their own expenses for printing and for the support of the agent of the committee on memorial.

The resolutions were discussed by Professor O. N. Hartshorn, of Ohio; W. D. Henkle, of Ohio; W. E. Crosby, of Ohio; and Douthett, of Pennsylvania; the amendment was agreed to, and the resolutions, as amended, adopted.

1865.—(Same *Proceedings*, p. 227.) At the time of going to press, the following members have been named [on the Committee on Educational Bureau]:

Massachusetts.—Superintendent J. D. Philbrick, Boston; C. Goodwin Clark, Boston; N. T. Allen, West Newton.

Rhode Island.—William A. Mowry, Providence; David M. Hoyt, Providence; Emory Lyon, Providence.

New York.—Dr. James Cruikshank, Albany; Superintendent J. W. Bulkley, Brooklyn; Superintendent E. A. Sheldon, Oswego.

Pennsylvania.—W. Henry Packer, Philadelphia; S. D. Ingram, Harrisburg; S. B. Thompson, Edinboro.

Maryland.—Dr. L. Steiner, Frederick; Professor A. Hollingshead, Baltimore; Dr. S. A. Harrison, Easton.

Ohio.—Hon. E. E. White, Columbus; W. E. Crosby, Cincinnati; Professor W. D. Henkle, Salem.

Michigan.—Hon. J. M. Gregory, Kalamazoo; Hon. O. S. Hosford, state superintendent; Professor A. S. Welch, Ypsilanti.

Missouri.—Superintendent Ira Divoll, St. Louis; C. S. Pennell, St. Louis; C. F. Childs, St. Louis.

Iowa.—Hon. Oran Faville, Des Moines; General B. A. Wiltz, Dubuque; Rev. S. Williams, Keokuk.

Oregon.—Henry Cummins, Salem; A. C. Gibbs and T. M. Gatch, Salem.

(e) 1865.—(*Proceedings*, pp. 305-7. From address of A. J. Rickoff on a "National Bureau of Education.") "Under the providence of God we have blindly fought for the freedom of the slave, and our next great task must be to educate him. The whole work should be under the direction of a Commissioner of Education, a man who should be qualified to organize and direct the energies of the whole people, not alone with reference to present emergency, and whose duty it should be to elaborate the best possible scheme of education for the South, which the government should see carried out. This is not a missionary society, having agents and teachers in the field. That ground is taken up by another association. But we can and we ought to advise as to the course to be taken by the government in the first stage of the affair; and I repeat it that the very first and the most important of all recommendations to be made is that Congress, at the very next session, should establish an educational department, and authorize the president to appoint a Commissioner of Education. But it is not only to meet the present state of affairs, in the only way in which it can properly be met, that I make this proposition. There is no plan by which the national government can promote the cause of education in the North and in the South so easily as by the appointment of a National Commissioner of Education. We shall presently see that the interest to which we appeal has always been exercised by the legislative and executive departments at Washington. We propose no radical innovation, nor is the proposition new. It has been made again and again in state and national associations, and has, I believe, always received their sanction; and I shall make no argument in its favor further than the one I have already urged, except to state somewhat precisely the general duties to which a Commissioner of Education should devote his energies. But it will be seen that every specification is an argument.

"He should make himself thoroughly acquainted with the public-school system of each state, as to its general and local officers and their relative duties; the different classes of public schools; the plans of taxation resorted to for public purposes, and the amounts raised thereby; the amount and nature of the investment of all school funds the interest of which is applied to school purposes; and the amount derived from all other sources. He should study the school statistics of the respective states, noting particularly, wherever it is possible to obtain such information, the average length of time the common schools have been kept open; the number of children entered; the average number belonging and average daily attendance; the number of children of each age attending school, and, so far as possible, the nature of the attendance as to the length of time children remain in the schools and the degree of regularity in attendance while enrolled; and of those matters which in their nature are variable he should make report on or before January 1 of each year, and of those matters which are more permanent he should make separate report, as often as once in four years, on the January preceding the expiration of each presidential term.

"He should, as far as possible, ascertain the number of chartered institutions of learning of every grade, their endowments, courses of study, number of students, charges for instruction, etc.; the number and character of all societies for the diffusion of useful knowledge, and the plans adopted for effecting their objects, and the number of publications of different kinds made thereby; the number and character of societies of adults

formed for mutual improvement, and the number of members participating in the advantages thereof; and these facts, and whatever other information he can gather from any and all sources whatsoever, bearing upon the educational facilities in the respective states, he should embody in his annual report.

"He should be required to make himself acquainted, as well as possible, with the school systems of foreign countries; their means of support; their organization; the courses of study pursued in primary, grammar, and high schools, academies, seminaries, normal schools, gymnasia, colleges, universities, etc., for the education of the young; the means of support, organization, and plans of procedure of societies established for mutual improvement, and societies and institutions of all kinds for the increase and diffusion of knowledge among men, whether literary, scientific, artistic, or industrial; also of all institutions established for deaf, mute, blind, and imbecile children and adults, as well as schools and institutions of all classes designed for the care of orphan and destitute children, or for the reformation of juvenile vagrants and offenders against law; and of all special schools, not above named, for the improvement of their members in the various arts and professions of life.

"He should make it a special object to procure, and keep on file for ready and convenient use, all educational reports, both general and local, of all authorities engaged in the management and instruction of any and all of the institutions above named. He should establish an educational library which should contain, not only these reports, but all valuable works and periodicals treating on educational subjects, especially those published in the English, German, and French languages; and of those which would be likely to prove most serviceable in this country he should make translations or cause the same to be made, and print them in his annual reports. He should procure, and preserve for examination by teachers and school officers, specimens of all maps, charts, diagrams, and pictured representations of all kinds whatsoever used in the processes of instruction, all kinds of primary-school apparatus, all kinds of school furniture used in this or foreign countries, and finally:

"In his annual reports he should embrace all information which might seem valuable to school officers and teachers of all grades, and to officers and members of all kinds of scientific and literary institutions and associations; and he should especially direct attention to all those features of institutions at home and abroad which might seem to him best adapted for general introduction throughout the United States; and particularly should he communicate such information as would be likely to encourage the formation of societies for enlightened improvement among all classes of our population."

APPENDIX D

1866.—(a) (*Proceedings* at Indianapolis, National Teachers' Association, p. 10.) A resolution was adopted to appoint a committee of five, to co-operate with the committee of the National Superintendents in urging upon the Senate of the United States the passage of the bill of the House of Representatives to establish the Department of Education. The committee appointed was Messrs. Z. Richards, James Cruikshank, A. C. Shortridge, J. S. Hart, and R. Coburn.

(b) (*Proceedings of National Association of Superintendents*, Indianapolis, 1866, pp. 74, 75, 76.) The committee's report on a National Bureau of Education was read by Mr. E. E. White, chairman; and the following resolutions, offered by G. W. Hoss, were adopted:

WHEREAS, An approved bill, looking to the establishment of a National Bureau of Education, has passed the House of Representatives in Congress: therefore

Resolved, That the thanks of this National Superintendents' Association are due, and are hereby tendered, to that body for its liberal and enlightened action on behalf of general education.

Resolved, That this body appoint a committee of five to properly bring the House bill to the attention of the United States Senate, and secure its early passage by that body.

The committee appointed was Messrs. E. E. White, O. Hosford, D. Stevenson, and J. W. Bulkley.

(c) 1868.—(*Proceedings of National Teachers' Association*, pp. 36, 37.) The United States Department of Education was represented by Mr. Z. Richards, an officer in the department at Washington. After the address of Mr. Z. Richards, Mr. E. E. White, of Ohio, offered the following resolution :

Resolved, That this association approves of the action of the Congress of the United States, in organizing a national Department of Education; and the continuance and liberal support of such a department is most earnestly recommended.

APPENDIX E

NATIONAL BUREAU OF EDUCATION¹

E. E. WHITE, COMMISSIONER OF COMMON SCHOOLS OF OHIO

Universal education, next to universal liberty, is a matter of deep national concern. The one distinctive, exhaustive idea of a democratic government is that it is a government by the people and for the people, i. e., by the whole people and for the whole people. A democracy is, in other words, but *an organized people*—they constitute the state. Its constitution and laws are but their recorded will, and all governmental power emanates from and centers in them.

In such a government, in its pure form, sovereignty is a universal right—to be exercised by all for the happiness and well-being of all. It is a right that can neither be denied nor restricted except by usurpation; and this is true whether the usurping power is one man or twenty millions of men. The right of sovereignty may be forfeited by crime or by its treasonable exercise, but it is in no sense an accident of birth or condition.

When the exercise of sovereignty by the people is both universal and *for the welfare of all*, a democracy is the perfection of human government; but to the extent that such right is withheld from the people or is wrongfully exercised by them, just to that extent are democratic institutions imperfect and a failure. Hence the *capability* of the people to exercise sovereignty for the general welfare is a fundamental and vital condition of republican institutions. When such capability does not exist, the universal exercise of sovereignty is a condition of national weakness, if not of peril. I am thus led to inquire what this capability includes, and what are the essential conditions of its existence.

It clearly requires the necessary *intelligence* to determine what will best subserve the interests of all; and the degree of this intelligence must not only be sufficient for self-government on the part of individuals and individual communities, but the people, as a whole, must be able to weigh and decide upon questions which involve national interests. Hence the higher the civilization embodied, the wider the extent of territory embraced, and the more various the pursuits and physical conditions of the people, the higher the degree of intelligence required for the right exercise of sovereignty.

But intelligence is not enough. Sovereignty is to be exercised *for the happiness and well-being of all*; and this involves the *moral capacity* to act in accordance with the dictates of intelligence. The second great law of civil liberty, as well as of religion, is: "Thou shalt love thy neighbor as thyself." Wherever the moral sense of the people is too feeble to impel the public will to regard the general welfare, democracy becomes the livery of despotism. To general intelligence we must, therefore, add public virtue as one of the essential conditions of the right exercise of sovereignty by the people.

In his centennial address at Plymouth, in 1820, Webster assigned three fundamental conditions as essential for the maintenance of republican institutions, namely, universal education, universal religious training, and the general division of landed property. The same conditions are laid down by De Tocqueville and other writers upon democratic governments.

¹ A paper read before the National Association of School Superintendents, at Washington, D. C., February 7, 1866.

If we turn to the pages of history, we shall find abundant confirmation of these views. We shall certainly search in vain for a single example where an ignorant and corrupt people have exercised sovereign power wisely and justly, or have even retained such power for any length of time. In all the past, wherever the intellectual and moral condition of the people has been low, there civil liberty has been lost. Universal liberty without universal intelligence has ever been the sport of civil tempests. Stolid ignorance and moral degradation tread above the grave of civil liberty all along the shores of the Mediterranean; but free government still abides with the intelligent and virtuous descendants of Tell, among the mountains of Switzerland — that diamond of liberty, set by a divine hand in the very center of European despotism! Passing to the New World, I need only to point to Mexico, where civil liberty lies prostrate and helpless beneath the crossed bayonets of two European despotisms! In a word, both reason and history compel the conclusion that republican institutions can rest upon no other basis than intelligence and virtue, and that these must pervade all heads and all hearts.

But general intelligence and public virtue are not the spontaneous fruits of civil liberty, although it is favorable to their development. As a necessary condition of their existence, they must be assiduously cultivated and diffused among the people. No human agency but the common school is capable of accomplishing this great work. Aided and vitalized by religion, it is the only sure foundation of the sovereignty of the people — the strength and shield of liberty.

This great fact was well understood by the founders of the American republic. They sought to found free institutions, not upon the quicksands of human instinct and passion, but upon the abiding rock of universal education and religious training. This was the grandest of all their innovations upon the moss-grown ideas of the Old World.

But the idea that education must be co-extensive with sovereignty was not original with our fathers. This has been the favorite doctrine of aristocracy the world over. Wherever the heel of despotism rests upon the neck of humanity, the ignorance of the oppressed has been urged as the justification of the oppressor. Despotism clamors for a restricted education, because she maintains a restricted sovereignty. The former is made just as wide as the latter.

Nor is the idea of universal sovereignty distinctly and originally American. Democracy had drawn her sword to give the people political power, long before the "Mayflower" cradled the new republic; and had won the prize, too, but only to see it turn to ashes in their hands. The grand, distinctive, original idea of the American republic is the union of these two principles, by making the one the basis of the other. With matchless wisdom our fathers joined liberty and learning in a perpetual and holy alliance, binding the latter to bless every child with instruction which the former invests with the rights and duties of citizenship. They made education and sovereignty co-extensive by making *both universal*. Here is the grandest conception of civil history, the hope and strength of civil liberty. And yet how few the successive steps by which our fathers passed from a conception of this idea to its practical embodiment! Truly they must have builded better than they knew.

Who can measure the results which the union of these two principles has already accomplished? When the sources of the nation's wonderful vitality and power during the great civil conflict through which it has just passed shall be determined, then first and foremost will stand the common school. The Civil War, which was a gigantic conspiracy against democratic institutions, found a *people* trained to comprehension of their duties and interests, with hearts to dare and hands to strike in their defense. The flame of civil liberty now burns with increasing brightness and new splendor, because our fathers, like the wise virgins, put into the lamp of free government the exhaustless oil of universal education.

I am thus brought back to the proposition with which I started, namely, that universal education is in this country a matter of deep national concern. Our experiment of

republican institutions is not upon the petty scale of a single municipality or state, but it covers half a continent, and embraces peoples of widely diverse interests and conditions, but who are to remain "one and inseparable." Every condition of our perpetuity and progress as a nation adds emphasis to the remark of Montesquieu, that it is in a republican government that *the whole power of education is required*. The one imperative necessity of this nation is that the public school be planted on every square mile of its peopled territory, and that the instruction imparted therein be carried to the highest point of efficiency.

But what can the general government do to aid in securing this object? In view of the startling fact that the great body of the people that occupy nearly one-half of the national territory are largely destitute of the means of education, this inquiry has the deepest significance.

Three plans have been suggested :

1. The government may establish and maintain throughout its territory a national system of education.
2. It may by congressional legislation *enforce* the maintenance of a public-school system upon every state.
3. It may by conditional appropriations and by a system of general inspection and encouragement through the agency of a National Bureau of Education *induce* each state to maintain an efficient school system.

Notwithstanding the cogency of the argument which may be adduced in favor of the first plan suggested, it is, in my judgment, too wide a departure from the settled educational policy of the country to be seriously entertained. Such a system would doubtless prove highly advantageous in a portion of the country, but it would be very disastrous in those states that have already carried the work of general education to a high point. Besides, all experience shows, and I regard it a law of school progress, that the nearer the responsibility of maintaining schools is brought to those directly benefited by them, the greater the vital power and efficiency of school systems.

These remarks do not apply to the education of the freedmen. On the contrary, I believe it is the sacred and bounden duty of the general government to undertake, for a time, the education of the emancipated millions who through the war have received back their birthrights of liberty and manhood. Deprived of the uplifting power of education they can but become idle and dissolute, and sink, if possible, still deeper in degradation and misery. Besides, the faith of the nation is solemnly pledged for the protection of these people in all their rights as freemen. But there is no protection so secure as *the power of self-protection*. Until the freedmen have their liberties in their own keeping they are not really free. They are now in a condition of abject ignorance, homeless and landless, subject to the heartless exactions of capital, and are the helpless victims of class prejudice and persecution. No protection of the government that fails to bring them intelligence can save them from impending peril. No standing army can so effectually maintain the plighted faith of the government toward these people as an army of schoolmasters. Let bayonets protect, if need be, the schoolhouse of the freedmen, and they will soon take care of their rights and liberties. They will do more. As free, self-directing, self-supporting laborers, they will bring prosperity again to the South, and make her war-ravaged fields smile with plenty.

To the second plan suggested there are manifestly serious objections. The imposition of a system of public instruction upon the several states by compulsory legislation can be justified only on the ground of public necessity in a great national crisis. And I am free to admit that so great is the necessity for the establishment of public schools throughout the South that even such a measure would be imperatively demanded if no other course to attain the same end were practicable.

The third plan is clearly in harmony with the settled educational policy of the country. It will neither cripple nor endanger any part of our educational system; and

it calls for the assumption of no questionable power by the general government. What is proposed is that the government shall undertake to do efficiently what it has, in the past, always done generously through its munificent grants of land for the encouragement of education.

Instead of unconditional grants of land or appropriations of money, such assistance should be proffered to the several states *on condition* that they reach a prescribed standard in the maintenance of free schools, and, further, that a specified portion of such grants or appropriations be applied to the support of institutions for the professional training of teachers.

The fact that a state could by maintaining an efficient school system receive from the national government, say, from \$100,000 to \$500,000 annually would certainly prove a potent influence in securing such action. I could, if necessary, fortify this statement by referring to experiments of the kind in other countries, and also in several of the states of the union where state appropriations for school purposes are conditioned on a compliance by the local school authorities with certain stipulations. This policy has uniformly, so far as my information goes, been successful. Communities indifferent to the advantages of free schools, if not prejudiced against them, have, with this assistance to their judgment, come to a wiser conclusion respecting their value. There is no eye-salve so efficacious in removing mental blindness as self-interest, and instances of states permitting the bounties of the government to pass by them have, at least, not been frequent. I am confident that the adoption of the plan suggested would speedily secure a common-school system in every state now destitute of such a system, and that it would lift up the schools, as it were bodily, in those states in which they are indifferently sustained. The impetus which it would give to the professional training of teachers throughout the country would be of incalculable value as a means of elevating and vitalizing school instruction.

There is one other consideration worthy of mention just here. The sparsely settled states of the far West and South need the assistance of the general government in the establishment of systems of education commensurate with their growing necessity—a fact the government has always recognized. There is not a state west of the Alleghenies that is not greatly indebted to the munificent grants of land made by Congress for the early establishment of its school system. Nor have common schools alone been aided. Several state universities are maintained largely from the proceeds of such grants. It is estimated that if the land grants of Congress for educational purposes had been properly managed, they would now present an aggregate educational fund of about five hundred millions of dollars.

On account of the unfortunate land-holding system of the South and the consequent sparseness of population, it would be difficult to sustain an efficient general school system there, even in times of prosperity. A proper division of landed property is as essential to universal education as it is to democratic institutions. At all events, in the present financial condition of the South the assistance of the government in establishing public schools is needed, and clearly that assistance will prove the best which is *conditional*.

As a means of paying the national debt, I know of no one measure fuller of promise than the increase and diffusion of intelligence among the mass of the people. The expenditure of five to ten millions of dollars a year for this purpose would be made good by almost immediate returns to the Post-Office and Treasury departments. The unschooled millions of the South write few letters, take few papers, and pay small taxes on incomes. There are no mines in this country so productive of wealth as the *mind* of the country. Educated labor is the true alchemy that can turn everything it touches into gold.

There is one other agency forming an essential part of the third plan proposed, which I hasten to consider. I allude to a National Bureau of Education, corresponding in many of its features to the national Department of Agriculture. The interests of education

would unquestionably be greatly promoted by the organization of such a bureau at the present time. It would render needed assistance in the establishment of school systems where they do not now exist, and prove a potent means for improving and vitalizing existing systems. I conceive it to be possible for a National Bureau of Education to be so managed as to well-nigh revolutionize school instruction in this country, and this too without its being invested with any official control of the school authorities in the several states. This it could accomplish :

1. By securing greater uniformity and accuracy in school statistics, and so translating and interpreting them that they may be more widely available and reliable as educational tests and measures. The present great diversity in the modes of collecting school statistics in the several states makes it almost impossible to use them for the purpose of comparing the results attained.

2. By bringing together the results of *school systems* in different communities, states, and nations, and determining their comparative value, not simply by measuring their length and breadth as with a yardstick, but by separating the pure gold of education from the dross, as in a crucible.

3. By collecting the results of all important experiments in new or special methods of instruction and management, and making them the common property of the school officers and teachers of the country.

4. By diffusing among the people much-needed information respecting the school laws of the different states ; the various modes of providing and disbursing school funds ; the different classes of school officers employed and their relative duties ; the qualifications demanded of teachers and the agencies provided for their special training ; the best methods of classifying and grading schools ; improved plans for schoolhouses, together with modes of heating and ventilation ; etc., etc.—information now obtained only by a few persons, and at great expense, but which is of the highest value to all intrusted with the management of schools.

5. By aiding communities and states in the organization of school systems in which oft-exploded errors shall be avoided, and vital agencies and well-tried improvements be included.

6. By the general diffusion of correct ideas respecting the *value* of education as a quickener of intellectual activities ; as a moral renovator ; as a multiplier of industry and a consequent producer of wealth ; and, finally, as the strength and shield of free institutions.

It is not possible to measure the influence which the faithful performance of these duties would exert upon the cause of education in this country ; and few persons who have not been intrusted with the management of school systems can fully realize how widespread and urgent is the demand for such assistance. Indeed, the very existence of the association I now address is of itself cogent proof of a demand for a national channel of communication between the school systems of the different states. Millions of dollars have been thrown away in fruitless experiments or stolid plodding for the want of just such information as a national bureau could make accessible to the people.

We have a strong confirmation of these views in the potent influence which Horace Mann exerted upon the schools of this country— notwithstanding his official reports had necessarily a limited circulation outside of his own state. Who can measure the influence which he would have exerted at the head of a National Bureau of Education ? How great the necessity for such a vital power to flow down from the general government, at the present time, permeating and vitalizing all parts of our school system ! *

We have also a very forcible illustration of the same position in the powerful influence exerted upon English elementary schools by the National Committee of Council of Education while James Ray Shuttleworth was its secretary ; and also subsequently.

* Mr. Mann may have originated few measures of educational progress, but he gave *wings*, as well as vital power, to the measures and agencies of others.

But in determining the probable efficiency and value of a National Bureau of Education, there is a fundamental law, running through the entire history of educational progress, which must not be overlooked. Idolatry has never been self-moved to cast its idols to the moles and the bats; nor has benighted paganism ever lifted itself into the light of a beneficent civilization. The impulse to such progress always comes from without and above. The civilization of the world has a fountain-head. The same law holds true in education. An ignorant community has no inward impulse to lead it to educate itself. Just where education is most needed, there it is always least appreciated and valued. The half-savage population of Ban de la Roche had for centuries hugged their barbarism when the good Oberlin went among them. Berkeley, a colonial governor of Virginia, thanked God that there were no free schools in his colony; and only twice twelve months ago the slave shamble, instead of the schoolhouse, still stood at the cross-roads of the Old Dominion. The demand for education is always awakened by external influences and agencies. Hence, Adam Smith and other writers on political economy expressly except education from the operation of the general law of supply and demand.

This law has a wide application in school affairs. Communities that have, indeed, some general appreciation of education rest satisfied with very indifferent schools until some influence supplies the impulse to reform and progress. No one obstacle lies so directly across the track of school advancement as the idea entertained by nearly every community that it has attained unsurpassed excellence in education; and this self-flattery often exists where the work of reform needs to be most earnestly undertaken. A national bureau would hold up to many school systems a mirror which would reveal attainable results and desirable changes.

I remark, finally, that the creation of a National Bureau of Education would be a practical recognition by the government of the value and necessity of universal education as a means of perpetuating free institutions. It would impart to the common-school cause a dignity and a character which would surely widen its influence and enhance its efficiency. It would be an argument for the education of the people which would be *felt* throughout the country.

The highest success of the bureau will, of course, depend much upon the manner in which it is officered. Instead of being made a burrow for seedy politicians, it must be made the center of the ripest experience and the most eminent attainments to be found among the educators of the country. The work of such a bureau must be directed by a mind that comprehends the aim and scope of education — its philosophy, its history, its processes, its practical details.

But we need to go farther than this. Commissions similar to the great commissions that have been sitting successively in Great Britain should be appointed by Congress to examine respectively into our systems of collegiate education, our professional or special schools, and the instruction of our public schools. Such investigations would exert a powerful influence upon our educational systems which have as yet neither crystallized nor fossilized. Now is the opportune time to introduce changes and modifications.

Let it be remembered that the next great problem of republican institutions is the uplifting of each successive generation of Americans to a true comprehension of their high duties and responsibilities. In this sublime work society, the state, and the nation must be conjoined. Around each child born into American liberty they must stand as a triple guarantee that the boon of education shall not be denied.

— From BARNARD's *Journal of Education*, Vol. XVI, 1866, pp. 177-86.

APPENDIX F

(From Barnard's *American Journal of Education*, Vol. XXI, 1870, p. 5.)

PREFATORY NOTE

The following "Report on Technical Schools, and Special Instruction Generally, in Different Countries," was printed in its present form by the subscriber in pursuance of

a call, January 19, 1870, by the House of Representatives on the Commissioner of Education for information on the subject. It was not completed so as to be communicated to Congress at the time (March 15) his connection with the office ceased; and has been brought to its present, still incomplete, condition at the special request of members of the House Committee on Education and Labor, at whose instance the call was originally made. This portion (pp. 33-786) is now published under the order of the House to print, in advance of the completion of the chapters relating to Great Britain and the United States, at the suggestion of the Commissioner of Education, to meet the calls on him for information respecting this class of institutions.

As originally planned, this document would have constituted a portion (Part IV) of a comprehensive survey of national education in different countries, which the undersigned had commenced in 1854, in view of a thorough discussion of the condition and improvement of public instruction in the United States.

This survey would embrace:

Parts I and II. Elementary and secondary education.

Vol. I. The German states.

Vol. II. Switzerland, France, Belgium, Holland, Denmark, Norway and Sweden, Russia, Turkey, Greece, Italy, Spain, Portugal, Great Britain.

Vol. III. The American states — with a comparison of the system and condition of public schools in the United States with those of the more advanced states of Europe.

Part III. Universities, colleges, and other institutions of superior instruction.

Part IV. Professional, class, and special instruction (schools of theology, law, medicine, teaching, agriculture, commerce, engineering, navigation, mines, technology, etc.).

Part V. Supplementary instruction (libraries, lectures, evening schools, etc.).

Part VI. Societies, museums, and collections for the promotion of education, science, literature, and the arts.

So far as the information relating to systems of elementary and secondary instruction was collected and prepared for publication in the Department Office of Education, it will be communicated in a few days to the secretary of the interior, with a plan for its speedy completion and publication.

HENRY BARNARD.

WASHINGTON, June 29, 1870.

APPENDIX G

EDUCATION — A NATIONAL INTEREST

Speech of James A. Garfield, of Ohio, in the House of Representatives, June 8, 1866, on a Bill "To Establish a National Bureau of Education," reported by the Select Committee on the Memorial of the National Association of School Superintendents.

(At the conclusion of a general discussion of the bill, the previous question upon the bill and the pending amendments was demanded and seconded, and the main question ordered.)

Mr. Garfield spoke as follows:

I did intend to make a somewhat elaborate statement of the reasons why the select committee recommended the passage of this bill; but I know the anxiety that many gentlemen feel to have this debate concluded, and to allow the private bills now on the calendar and set for this day to be disposed of, and to complete as soon as possible the work of this session. I will, therefore, abandon my original purpose and restrict myself to a brief statement of a few leading points in the argument, and leave the decision with the House. I hope this waiving of a full discussion of the bill will not be construed into a confession that it is inferior in importance to any measure before the House; for I know of none that has a nobler object, or that more vitally affects the future of this nation.

¹The committee consisted of Garfield, of Ohio; Patterson, of New Hampshire; Boutwell, of Massachusetts; Donnelly, of Minnesota; Moulton, of Illinois; Goodyear, of New York; and Randall, of Pennsylvania.

I first ask the House to consider the magnitude of the interests involved in this bill. The very attempt to discover the amount of pecuniary and personal interest we have in our schools shows the necessity of such a law as is here proposed. I have searched in vain for any complete or reliable statistics showing the educational condition of the whole country. The estimates I have made are gathered from various sources and can only be approximately correct. I am satisfied, however, that they are far below the truth.

Even by the incomplete and imperfect educational statistics of the Census Bureau, it appears that, in 1860, there were in the United States 115,224 common schools, 500,000 school officers, 150,241 teachers, and 5,477,037 scholars; thus showing that more than six millions of the people of the United States are directly engaged in the work of education.

Not only has this large proportion of our population been thus engaged, but the Congress of the United States has given fifty-three million acres of public lands to fourteen states and territories of the union for the support of schools. In the old ordinance of 1785 it was provided that one section of every township, one thirty-sixth of all the public lands of the United States, should be set apart and held forever sacred to the support of the schools of the country. In the ordinance of 1787 it was declared that "religion, morality, and knowledge being necessary to good government and the happiness of mankind, schools and the means of education shall forever be encouraged."

It is estimated that at least \$50,000,000 have been given in the United States by private individuals for the support of schools. We have thus an interest, even pecuniarily considered, hardly second to any other. We have tolerably complete school statistics from only seventeen states of the union.

Our Congressional Library contains no educational reports whatever from the remaining nineteen. In those seventeen states there are 90,835 schools, 190,000 teachers, 5,107,285 pupils, and \$34,000,000 annually appropriated by the legislatures for the support and maintenance of common schools. Notwithstanding the great expenditures entailed upon them during five years of war, they raised by taxation \$34,000,000 annually for the support of common schools. In several states of the union more than 50 per cent. of all the tax imposed for state purposes is for the support of common schools. And yet gentlemen are impatient because we wish to occupy a short time in considering this bill!

I will not trouble the House by repeating commonplaces so familiar to every gentleman here, as that our system of government is based upon the intelligence of the people. But I wish to suggest that there never has been a time when all our educational forces should be in such perfect activity as at the present day.

Ignorance—stolid ignorance—is not our most dangerous enemy. There is very little of that kind of ignorance among the white population of this country.

In the Old World, among the despotic governments of Europe, the great disfranchised class—the pariahs of political and social life—are indeed ignorant, mere inert masses, moved upon and controlled by the intelligent and cultivated aristocracy. Any unrepresented and hopelessly disfranchised class in a government will inevitably be struck with intellectual paralysis. Our late slaves afford a sad illustration.

But among the represented and voting classes of this country, where all are equal before the law, and every man is a political power for good or evil, there is but little of the inertia of ignorance. The alternatives are not education or no education; but shall the power of the citizen be directed aright toward industry, liberty, and patriotism, or, under the baneful influence of false theories and evil influences, shall it lead him continually downward till it ruin both him and the government?

If he is not educated in the school of virtue and integrity, he will be educated in the school of vice and iniquity. We are, therefore, afloat on the sweeping current; we must make head against it, or we shall go down with it to the saddest of destinies.

According to the census of 1860 there were 1,218,311 free white inhabitants of the

United States over twenty-one years of age who could not read nor write, and 871,418 of those were American-born citizens. One-third of a million of people are being annually thrown upon our shores from the Old World, a large per cent. of whom are uneducated, and the gloomy total has been swelled by the 4,000,000 slaves admitted to citizenship by the events of the war.

Such, sir, is the immense force which we must now confront by the genius of our institutions and the light of our civilization. How shall it be done? An American citizen can give but one answer. We must pour upon them all the light of our public schools. We must make them intelligent, industrious, patriotic citizens, or they will drag us and our children down to their level. Does not this question rise to the full height of national importance and demand the best efforts of statesmanship to adjust it? Mr. Mann has well said:

That legislators and rulers are responsible.

In our country and in our times no man is worthy the honored name of a statesman who does not include the highest practicable education of the people in all of his plans of administration.

He may have eloquence, he may have a knowledge of all history, diplomacy, jurisprudence, and by these he may claim, in other countries, the elevated rank of a statesman, but unless he speaks, plans, labors at all times and in all places for the culture and edification of the whole people, he is not, he cannot be, an American statesman.

Gentlemen who have discussed the bill this morning tell us that it will result in great expense to the government. Whether an enterprise is expensive or not is altogether a relative question, to be determined by the importance of its object.

Now, what have we done as a nation in the way of expenses? In 1832 we organized a Coast Survey Bureau, and have expended millions upon it. Its officers have triangulated thousands of miles of our coasts, have made soundings of all our bays and harbors, and carefully mapped the shoals, breakers, and coast lines from our northern boundary on the Atlantic to the extreme northern boundary on the Pacific coast. They have established eight hundred tidal stations to observe the fluctuations of the tides. We have expended vast sums in order perfectly to know the topography of our coasts, lakes, and rivers, that we might make navigation more safe. Is it of no consequence that we explore the boundaries of that wonderful intellectual empire which incloses within its domain the fate of succeeding generations, and of this republic? The children of today will be the architects of our country's destiny in 1900.

We have established an Astronomical Observatory where the movements of the stars are watched, latitude and longitude calculated, and chronometers regulated for the benefit of navigation. For this observatory we pay one-third of a million per annum. Is it of no consequence that we observe the movements of those intellectual lights which shall, in the time to come, be guiding stars in our national firmament?

We have established a Light-House Board who are employing all the aids of science, to discover the best modes of regulating the beacons upon our shores; they are placing buoys as way-marks to guide ships safely into our harbors. Will you not create a light-house board to set up beacons for the coming generation, not as lights to the eye, but to the mind and heart, that shall lead them safely in the perilous voyage of life, and enable them to transmit the blessings of liberty to those who shall come after them?

We have set on foot a score of expeditions to explore the mountains and valleys, the lakes and rivers, of this and other countries. We have expended money without stint to explore the Amazon and the Jordan, Chili and Japan, the gold shores of the Colorado and the copper cliffs of Lake Superior; to gather and publish the great facts of science, and to exhibit the material resources of physical nature. Will you refuse the pitiful sum of \$13,000 to collect and record the intellectual resources of this country, the elements that lie behind all material wealth and make it either a curse or a blessing?

We have paid three-quarters of a million dollars for the survey of the route for the Pacific railroad, and have published the results at a great cost in thirteen quarto volumes, with accompanying maps and charts. The money for these purposes was freely

expended, and now, when it is proposed to appropriate \$13,000 to aid in increasing the intelligence of those who will use that great continental highway when it is completed, we are reminded of our debts, and warned against increasing our expenditures. It is difficult to treat such an objection with the respect that always is due in this hall of legislation.

We have established a Patent Office, where are annually accumulated thousands of models of new machinery invented by our people. Will you make no expenditure for the benefit of the intelligence that shall stand behind that machinery and be its controller? Will you bestow all your favors upon the engine, and ignore the engineer? I will not insult the intelligence of this House by waiting to prove that money paid for education is the most economical of all expenditure; that it is cheaper to reduce crime than to build jails; that schoolhouses are less expensive than rebellions. A tenth of our national debt expended in public education fifty years ago would have saved us the blood and treasure of the late war. A far less sum may save our children from a still greater calamity.

We expend hundreds of thousands annually to promote the agricultural interests of the country; to introduce the best methods in husbandry. Is it not of more consequence to do something for the farmer of the future than for the farm of today?

As man is more precious than soil, as the immortal spirit is nobler than the clod it animates, so is the object of this bill more important than any mere pecuniary interest.

The genius of our government does not allow us to establish a compulsory system of education, as is done in some of the countries of Europe. There are states in this union, however, which have adopted a compulsory system, and perhaps that is well. It is for each state to determine. A distinguished gentleman from Rhode Island told me lately that it is now the law in that state that every child within its borders shall attend school, and that every vagrant child shall be taken in charge by the authorities and sent to school. It may be well for other states to pursue the same course; but probably the general government can do nothing of the sort. Whether it has the right of compulsory control or not, we propose none in this bill.

But we do propose to use that power, so effective in this country, of letting in light on subjects, and holding them up to the verdict of public opinion. If it could be published annually from this capitol, through every school district of the United States, that there are states in the union that have no system of common schools; and if their records could be placed beside the records of such states as Massachusetts, New York, Pennsylvania, Ohio, and other states that have a common-school system, the mere statement of the fact would rouse their energies, and compel them for shame to educate their children. It would shame out of their delinquency all the delinquent states.

Mr. Speaker, if I were called upon today to point to that in my own state of which I am most proud, I would not point to any of the flaming lines of her military record, to the heroic men and the brilliant officers she gave to the late contest; I would not point to any of her leading men of the past or the present; but I would point to her common schools; I would point to the honorable fact that in the great struggle of five years through which we have just passed she has expended \$12,000,000 for the support of her public schools. I do not include in that amount the sums expended upon our higher institutions of learning. I would point to the fact that 52 per cent. of the taxation of Ohio for the last five years, aside from the war tax and the tax for the payment of her public debt, has been for the support of her schools. I would point to the schools of Cincinnati, Cleveland, Toledo, and other cities of the state, if I desired a stranger to see the glory of Ohio. I would point to the thirteen thousand schoolhouses and the seven hundred thousand pupils in the schools of Ohio. I would point to the \$3,000,000 she has paid for schools during the last year alone. This, in my judgment, is the proper gauge by which to measure the progress and glory of states.

Gentlemen tell us there is no need of this bill—the states are doing well enough

now. Do they know through what a struggle every state has come up that has secured a good system of common schools? Let me illustrate this by the example of Pennsylvania. Notwithstanding the early declaration of William Penn :

That which makes a good constitution must keep it, namely, men of wisdom and virtue; qualities that, because they descend not with worldly inheritances, must be carefully propagated by a virtuous education of youth, for which spare no cost, for by such parsimony all that is saved is lost;

notwithstanding that wise master-builder incorporated this sentiment in his "framework of government" and made it the duty of the governor and council "to establish and support public schools;" notwithstanding Benjamin Franklin, from the first hour he became a citizen of Pennsylvania, inculcated the value of useful knowledge to every human being in every walk of life, and by his personal and pecuniary effort did establish schools and a college for Philadelphia; notwithstanding the constitution of Pennsylvania made it obligatory upon the legislature to foster the education of the citizens; notwithstanding all this, it was not till 1833-34 that a system of common schools, supported in part by taxation of property of the state, for the common benefit of all the children of the state, was established by law; and although the law was passed by an almost unanimous vote of both branches of the legislature, so foreign was the idea of public schools to the habits of the people, so odious was the idea of taxation for this purpose, that even the poor, who were to be specially benefited, were so deluded by political demagogues as to clamor for its repeal.

Many members who voted for the law lost their nomination, and others, although nominated, lost their election. Some were weak enough to pledge themselves to a repeal of the law; and in the session of 1835 there was an almost certain prospect of its repeal and the adoption in its place of an odious and limited provision for educating the children of the poor by themselves. In the darkest hour of the debate, when the hearts of the original friends of the system were failing from fear, there rose on the floor of the house one of its early champions, one who, though not a native of the state, felt the disgrace which the repeal of this law would inflict like a knife in his bosom; one who, though no kith or kin of his would be benefited by the operations of the system, and though he should share its burdens, would only partake with every citizen in its blessings; one who had voted for the original law, although introduced by his political opponents, and who had defended and gloried in his vote before an angry and unwilling constituency; this man, then in the beginning of his public career, threw himself into the conflict, and by his earnest and brave eloquence saved the law, and gave a noble system of common schools to Pennsylvania.

I doubt if, at this hour, after thirty years crowded full of successful labors at the bar, before the people, and in halls of legislation, the venerable and distinguished member [Mr. Stevens], who now represents a portion of the same state in this House, can recall any speech of his life with half the pleasure he does that, for no measure with which his name has been connected is so fraught with blessings to hundreds of thousands of children, and to homes innumerable. I hold in my hand a copy of his brave speech, and I ask the clerk to read the passages I have marked :

I am comparatively a stranger among you, born in another, in a distant state; no parent or kindred of mine did, does, or probably ever will dwell within your borders. I have none of those strong cords to bind me to your honor and your interest; yet, if there is any one thing on earth which I ardently desire above all others, it is to see Pennsylvania standing up in her intellectual, as she confessedly does in her physical, resources, high above all her confederate rivals. How shameful, then, would it be for these her native sons to feel less so, when the dust of their ancestors is mingled with her soil, their friends and relatives enjoy her present prosperity, and their descendants, for long ages to come, will partake of her happiness or misery, her glory or her infamy! . . .

In giving this law to posterity, you act the part of the philanthropist, by bestowing upon the poor as well as the rich the greatest earthly boon which they are capable of receiving; you act the part of the philosopher, by pointing, if you do not lead them, up the hill of science; you act the part of the hero, if it be true, as you say, that popular vengeance follows close upon your footsteps. Here then, if you wish true popularity, is a theater on which you may acquire it. . . .

Let all, therefore, who would sustain the character of the philosopher or philanthropist sustain this law. Those who would add thereto the glory of the hero can acquire it here; for, in the present state of feeling in Pennsylvania, I am willing to admit that but little less dangerous to the public man is the war-club and battle-ax of savage ignorance than to the lion-hearted Richard was the keen scimitar of the Saracen. He who would oppose it, either through inability to comprehend the advantages of general education or from unwillingness to bestow them on all his fellow-citizens, even to the lowest and the poorest, or from dread of popular vengeance, seems to want either the head of the philosopher, the heart of the philanthropist, or the nerve of the hero.

He has lived long enough to see this law, which he helped to found in 1834, and more than any other man was instrumental in saving from repeal in 1835, expanded and consolidated into a noble system of public instruction. Twelve thousand schools have been built by the voluntary taxation of the people, to the amount, for school-houses alone, of nearly ten million dollars. Many millions of children have been educated in these schools. More than seven hundred thousand attended the public schools of Pennsylvania in 1864-65, and their annual cost, provided by voluntary taxation in the year 1864, was nearly three million dollars, giving employment to sixteen thousand teachers.

It is glory enough for one man to have connected his name so honorably with the original establishment and effective defense of such a system.

But it is said that the thirst for knowledge among the young; the pride and ambition of parents for their children, are agencies powerful enough to establish and maintain thorough and comprehensive systems of education.

This suggestion is answered by the unanimous voice of publicists and political economists. They all admit that the doctrine of "demand and supply" does not apply to educational wants. Even the most extreme advocates of the principle of *laissez faire* as a sound maxim of political philosophy admit that governments must interfere in aid of education. We must not wait for the *wants* of the rising generation to be expressed in a *demand* for means of education. We must ourselves discover and supply their *needs*, before the time for supplying them has forever passed. John Stuart Mill says:

But there are other things of the worth of which the demand of the market is by no means a test; things of which the utility does not consist in ministering to inclinations, nor in serving the daily uses of life, and the want of which is least felt where the need is greatest. This is peculiarly true of those things which are chiefly useful as tending to raise the character of human beings. The uncultivated cannot be judges of cultivation.

Those who most need to be made wiser and better usually desire it least, and, if they desired it, would be incapable of finding the way to it by their own lights. It will continually happen on the voluntary system that, the end not being desired, the means will not be provided at all, or that, the persons requiring improvement having an imperfect or altogether erroneous conception of what they want, the supply called forth by the demand of the market will be anything but what is really required. Now, any well-intentioned and tolerably civilized government may think, without presumption, that it does, or ought to, possess a degree of cultivation above the average of the community which it rules, and that it should, therefore, be capable of offering better education and better instruction to the people than the greater number of them would spontaneously select.

Education, therefore, is one of those things which it is admissible in principle that the government should provide for the people. The case is one to which the reasons of the non-interference principle do not necessarily or universally extend.

With regard to elementary education, the exception to ordinary rules may, I conceive, justifiably be carried still farther. There are certain primary elements and means of knowledge which it is in the highest degree desirable that all human beings born into the community should acquire during childhood. If their parents, or those on whom they depend, have the power of obtaining for them this instruction, and fail to do it, they commit a double breach of duty: toward the children themselves, and toward the members of the community generally, who are all liable to suffer seriously from the consequences of ignorance and want of education in their fellow-citizens. It is, therefore, an allowable exercise of government to impose on parents the legal obligation of giving elementary instruction to children. This, however, cannot fairly be done without taking measures to insure that such instruction shall always be accessible to them, either gratuitously or at a trifling expense.

This is the testimony of economic science. I trust the statesmen of this Congress will not think the subject of education too humble a theme for their most serious consideration. It has engaged the earnest attention of the best men of ancient and modern times, especially of modern statesmen and philanthropists.

I will fortify myself in the positions I have taken by quoting the authority of a few men who are justly regarded as teachers of the human race. If I keep in their company, I cannot wander far from the truth. I cannot greatly err while I am guided by their counsel.

In his eloquent essay entitled *Way to Establish a Free Commonwealth*, John Milton said :

To make the people fittest to choose, and the chosen fittest to govern, will be to mend our corrupt and faulty education, to teach the people faith, not without virtue, temperance, modesty, sobriety, economy, justice; not to admire wealth or honor; to hate turbulence and ambition; to place everyone his private welfare and happiness in the public peace, liberty, and safety.

England's most venerable living statesman, Lord Brougham, enforced the same truth in these noble words :

Lawgivers of England! I charge ye, have a care! Be well assured that the contempt lavished upon the cabals of Constantinople, when the council disputed on a text, while the enemy, the derider of all their texts, was thundering at the gate, will be a token of respect compared with the loud shout of universal scorn which all mankind in all ages will send up against you, if you stand still and suffer a far deadlier foe than the Turcoman; suffer the parent of all evil, all falsehood, all hypocrisy, all discharity, all self-seeking — him who covers over with pretexes of conscience the pitfalls that he digs for the souls on which he preys — to stalk about the fold and lay waste its inmates; stand still and make no head against him, upon the vain pretext to soothe your indolence, that your action is obstructed by religious cabals — upon the far more guilty speculation that by playing a party game you can turn the hatred of conflicting professors to your selfish purposes!

Let the soldier be abroad, if he will; he can do nothing in this age. There is another personage abroad, a person less imposing — in the eye of some insignificant. The schoolmaster is abroad, and I trust to him, armed with his primer, against the soldier in full uniform array.

Lord Brougham gloried in the title of schoolmaster, and contrasted his work with that of the military conqueror in these words :

The conqueror stalks onward with the "pride, pomp, and circumstance of war," banners flying, shouts rending the air, guns thundering, and martial music pealing, to drown the shrieks of the wounded and the lamentations for the slain. Not thus the schoolmaster in his peaceful vocation. He meditates and prepares in secret the plans which are to bless mankind; he slowly gathers around him those who are to further their execution; he quietly, though firmly, advances in his humble path, laboring steadily, but calmly, till he has opened to the light all the recesses of ignorance, and torn up by the roots the weeds of vice. His is a progress not to be compared with anything like a march; but it leads to a far more brilliant triumph, and to laurels more imperishable than the destroyer of his species, the scourge of the world, ever won.

The learned and brilliant Guizot, who regarded his work in the office of minister of public instruction, in the government of France, the noblest and most valuable work of his life, has left us this valuable testimony:

Universal education is henceforth one of the guarantees of liberty and social stability. As every principle of our government is founded on justice and reason, to diffuse education among the people, to develop their understandings and enlighten their minds, is to strengthen their constitutional government and secure its stability.

In his farewell address Washington wrote these words of wise counsel:

Promote, as an object of primary importance, institutions for the general diffusion of knowledge. In proportion as the structure of a government gives force to public opinion, it is essential that public opinion should be enlightened.

In his inaugural message, when first taking the presidential chair, the elder Adams said :

The wisdom and generosity of the legislature in making liberal appropriations in money for the benefit of schools, academies, and colleges, is an equal honor to them and to their constituents, a proof of their veneration for letters and science, and a portent of great and lasting good to North and South America and to the world. Great is truth — great is liberty — great is humanity — and they must and will prevail.

Chancellor Kent used this decided language :

The parent who sends his son into the world uneducated defrauds the community of a lawful citizen, and bequeaths to it a nuisance.

I shall conclude this citation of opinions with the stirring words of Edward Everett :

I know not to what we can better liken the strong appetite of the mind for improvement than to a hunger and thirst after knowledge and truth, nor how can we better describe the province of education than to

say it does that for the intellect which is done for the body, when it receives the care and nourishment which are necessary for its growth, health, and strength?

From this comparison, I think, I derive new views of the importance of education. It is now a solemn duty, a tender, sacred trust.

What! feed a child's body and let his soul hunger! pamper his limbs and starve his faculties!

Plant the earth, cover a thousand hills with your droves of cattle, pursue the fish to their hiding places in the sea, and spread out your wheat fields across the plains in order to supply the wants of that body, which will soon be as cold and senseless as their poorest clod, and let the pure spiritual essence within you, with all its glorious capacities for improvement, languish and pine! What! build factories, turn in rivers upon the waterwheels, unchain the imprisoned spirits of steam, to weave a garment for the body, and let the soul remain unadorned and naked!

What! send out your vessels to the farthest ocean, and make battle with the monsters of the deep, in order to obtain the means of lighting up your dwellings and workshops, and prolonging the hours of labor for the meat that perisheth, and permit that vital spark, which God has kindled, which he has intrusted to our care to be fanned into a bright and heavenly flame; permit it, I say, to languish and go out!

It is remarkable that so many good things have been said, and so few things done, by our national statesmen in favor of education. If we inquire what has been done by the governments of other countries to support and advance public education, we are compelled to confess with shame that every government in Christendom has given a more intelligent and effective support to schools than has our own.

The free cities of Germany organized the earliest school systems after the separation of church and state. The present schools of Hamburg have existed more than one thousand years. The earliest school codes were framed in the duchy of Wurtemberg in 1565, and in the electorate of Saxony in 1580. Under these codes were established systems of schools, more perfect, it is claimed, than the school system of any state of the American union. Their systems embraced the gymnasium and the university, and were designed, as their laws expressed it, "to carry youth from the elements to the degree of culture demanded for offices in church and state."

The educational institutions of Prussia are too well known to need a comment. It is a sufficient index of their aim and high character that a late Prussian school officer said of his official duties:

I promised God that I would look upon every Prussian peasant child as a being who could complain of me before God if I did not provide for him the best education as a man and a Christian which it was possible for me to provide.

France did not think herself dishonored by learning from a nation which she had lately conquered; for when, in 1831, she began to provide more fully for the education of her people, she sent the philosopher Cousin to Holland and Prussia, to study and report upon the schools of those states. Guizot was made minister of public instruction, and held the office from 1832 to 1837. In 1833 the report of Cousin was published, and the educational system of France was established on the Prussian model.

No portion of his brilliant career reflects more honor upon Guizot than his five years' work for the schools of France. The fruits of his labors were not lost in the revolutions that followed. The present emperor is giving his best efforts to the perfection and maintenance of schools, and is endeavoring to make the profession of the teacher more honorable and desirable than it has been hitherto.

Through the courtesy of the secretary of state, I have obtained the last annual report of the minister of public instruction in France, which exhibits the present state of education in that empire.

At the last enumeration there were in France, in the colleges and lyceums, 65,832 pupils; in the secondary schools, 200,000; and in the primary or common schools, 4,720,234.

Besides the large amount raised by local taxation, the imperial government appropriated, during the year 1865, 2,349,051 francs for the support of primary schools.

Teaching is one of the regular professions in France, and the government offers prizes, and bestows honors upon the successful instructor of children. During the year 1865, 1,154 prizes were distributed to teachers in primary schools.

An order of honor, and a medal worth 250 francs, is awarded to the best teacher in each commune.

After a long and faithful service in his profession, the teacher is retired on half pay, and, if broken down in health, is pensioned for life. In 1865 there were 4,245 teachers on the pension list of France. The minister says in his report: "The statesmen of France have determined to show that the country knows how to honor those who serve her even in obscurity."

Since 1862, 10,243 libraries for the use of common schools have been established, and they now contain 1,117,352 volumes, more than a third of which have been furnished by the imperial government. Half a million text-books are furnished for the use of children who are too poor to buy them. It is the policy of France to afford the means of education to every child in the empire.

When we compare the conduct of other governments with our own, we cannot accuse ourselves so much of illiberality as of reckless folly in the application of our liberality to the support of schools. No government has expended so much to so little purpose. To fourteen states alone we have given, for the support of schools, 83,000 square miles of land; or an amount of territory nearly equal to two such states as Ohio. But how has this bountiful appropriation been applied? This chapter in our history has never been written. No member of this House or the Senate, no executive officer of the government, now knows, and no man ever did know, what disposition has been made of this immense bounty. This bill requires the Commissioner of Education to report to Congress what lands have been given to schools, and how the proceeds have been applied. If we are not willing to follow the example of our fathers in giving, let us, at least, perpetuate the record of their liberality, and preserve its beneficent results.

Mr. Speaker: I have thus hurriedly and imperfectly exhibited the magnitude of the interests involved in the education of American youth; the peculiar condition of affairs which demands at this time an increase of our educational forces; the failure of a majority of the states to establish school systems; the long struggles through which others have passed in achieving success; and the humiliating contrast between the action of our government and those of other nations in reference to education; but I cannot close without referring to the bearing of this measure upon the peculiar work of this Congress.

When the history of the Thirty-ninth Congress is written, it will be recorded that two great purposes inspired it, and made their impress upon all its efforts, viz.: to build up free states on the ruins of slavery, and to extend to every inhabitant of the United States the rights and privileges of citizenship.

Before the divine Architect builded order out of chaos, he said: "Let there be light." Shall we commit the fatal mistake of building up free states without expelling the darkness in which slavery shrouded them? Shall we enlarge the boundaries of citizenship and make no provision to increase the intelligence of the citizen?

I share most fully in the aspirations of this Congress, and give my most cordial support to its policy; but I believe its work will prove a disastrous failure unless it makes the schoolmaster its ally, and aids him in preparing the children of the United States to perform the work now begun.

The stork is a sacred bird in Holland, and is protected by public law, because it destroys those insects which would undermine the dikes and let the sea again overwhelm the rich fields of the Netherlands. Shall this government do nothing to foster and strengthen those educational agencies which alone can shield the coming generation from ignorance and vice, and make it the impregnable bulwark of liberty and law?

I know that this measure presents few attractions to those whose chief work is to watch the political movements which relate only to nominating conventions and elections. The mere politician will see in it nothing valuable, for the millions of children to be benefited by it can give him no votes. But I appeal to those who care more for the

safety and glory of this nation than for any mere temporary advantage, to aid in giving to education the public recognition and active support of the federal government.

The final action of the House on the bill was not reached till June 19, when, the question being taken by yeas and nays, it was passed by a vote of 80 yeas to 44 nays, with the following title and provisions:

AN ACT TO ESTABLISH A DEPARTMENT OF EDUCATION

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there shall be established, at the city of Washington, a Department of Education for the purpose of collecting such statistics and facts as shall show the condition and progress of education in the several states and territories, and of diffusing such information respecting the organization and management of schools and school systems, and methods of teaching, as shall aid the people of the United States in the establishment and maintenance of efficient school systems, and otherwise promote the cause of education throughout the country.

SEC. 2. *And be it further enacted,* That there shall be appointed by the president, by and with the advice and consent of the Senate, a Commissioner of Education, who shall be intrusted with the management of the department herein established, and who shall receive a salary of four thousand dollars per annum, and who shall have authority to appoint one chief clerk of his department, who shall receive a salary of two thousand dollars per annum, one clerk who shall receive a salary of eighteen hundred dollars per annum, and one clerk who shall receive a salary of sixteen hundred dollars per annum, which said clerks shall be subject to the appointing and removing power of the Commissioner of Education.

SEC. 3. *And be it further enacted,* That it shall be the duty of the Commissioner of Education to present annually to Congress a report embodying the results of his investigations and labors, together with a statement of such facts and recommendations as will, in his judgment, subserve the purpose for which this department is established. In the first report made by the Commissioner of Education under this act there shall be presented a statement of the several grants of land made by Congress to promote education, and the manner in which these several trusts have been managed, the amount of funds arising therefrom, and the annual proceeds of the same, as far as the same can be determined.

SEC. 4. *And be it further enacted,* That the commissioner of public buildings is hereby authorized and directed to furnish proper offices for the use of the department herein established.

The bill, in the Senate, was referred to the standing committee on the judiciary, who recommended its passage without amendment; and, after a debate on February 26, 1867, on a motion to substitute Bureau for Department, was passed without division on March 1, and signed by the president March 2. On March 11 Henry Barnard was nominated by President Johnson, on March 16 was confirmed by the unanimous vote of the Senate, and on March 17 entered on the duties of Commissioner of Education.

APPENDIX H

(Dr. Barnard's plan of a central agency for the United States to advance education (Vol. XXI.)

The following plan for "the increase and diffusion of knowledge," of education, and especially of popular education, and plans for its improvement through the Smithsonian Institution, or the American Association for the Advancement of Education, was submitted to the association by Hon. Henry Barnard:

The institution (or association) to appoint a secretary or agent, with a salary, and to furnish a room for an officer and depository of educational documents and apparatus, and beyond this not to be liable for any expense.

Again by the secretary or agent:

1. To devote himself exclusively to the "increase and diffusion of knowledge" on the subject of education, and especially of the condition and means of improving popular education, and particularly
2. To answer all personal or written inquiries on the subject, and collect and make available for use information as to all advances made in the theory and practice of education in any one state or country.
3. To attend, so far as may be consistent with other requisitions on his time, and without charge to the funds of the institution (or association), educational conventions of a national and state character, for the purpose of collecting and disseminating information.
4. To edit a publication to be entitled the *American Journal and Library of Education*, on the plan set forth in the accompanying paper (A).
5. To collect:
 - (a) Plans and models of schoolhouses and furniture.
 - (b) Specimens of maps and other material aids of education.
 - (c) Educational reports and documents from other states and countries.
6. To institute a system of educational exchange between literary institutions in this and other countries.
7. To make arrangements, and effect, if practicable, at least one meeting or conference of the friends of educational improvement in Washington (or elsewhere) every year.
8. To submit annually a report in which shall be given a summary of the progress of education in each state, and, as far as practicable, in every country.

A.

Plan of publication.—A quarterly or monthly issue under the general title of the *American Journal of Education*.

I. A *Journal of Education*, to be issued in quarterly or monthly numbers, embracing articles on systems, institutions, and methods of education, and the current intelligence of literature and education, and to make an octavo volume annually of at least six hundred pages.

II. A *Library of Education*, to consist of a series of independent treatises on the following (among other) subjects, to be issued in parts, and to be forwarded with the *Journal* to subscribers; the several parts or treatises to make an octavo volume of at least six hundred pages per year:

1. A catalogue of the best publications on the organization, instruction, and discipline of schools, of every grade, and on the principles of education, in the English, French, and German languages.

2. A history of education, ancient and modern.

3. An account of elementary instruction in Europe, based on the reports of Rache, Stowe, Mann, and others.

4. National education in the United States; or contributions to the history and improvement of common or public schools and other institutions, means, and agencies of popular education in the several states.

5. School architecture; or the principles of construction, ventilation, warming, acoustics, seating, etc., applied to schoolrooms, lecture halls, and class-rooms, with illustrations.

6. Normal schools, and other institutions, means, and agencies for the professional training and improvement of teachers.

7. System of public education for large cities and villages, with an account of the schools and other means of popular education and recreation in the principal cities of Europe and in this country.

8. System of popular education for sparsely populated districts, with an account of the schools in Norway and the agricultural portions of other countries.

9. Schools of agriculture, and other means of advancing agricultural improvement.

10. Schools of science applied to the mechanic arts, civil engineering, etc.

11. Schools of trade, navigation, commerce, etc.

12. Female education, with an account of the best seminaries for females in this country and in Europe.

13. Institutions for orphans.

14. Schools of industry, or institutions for truant, idle, or neglected children, before they have been convicted of crime.

15. Reform schools, or institutions for young criminals.

16. Houses of refuge, for adult criminals.

17. Secondary education, including schools of agriculture, engineering, trade, navigation, etc.

18. Colleges and universities.

19. Schools of theology, law, and medicine.

20. Military and naval schools.

21. Supplementary education, including adult schools, evening schools, courses of popular lectures, debating classes, mechanic institutes, etc.

22. Libraries, with hints for the purchase, arrangement, cataloguing, drawing, and preservation of books, especially in libraries designed for popular use.

23. Institutions for the deaf and dumb, blind, and idiots.

24. Societies for encouragement of science, the arts, and education.

25. Public museums and galleries.

26. Public gardens, and other sources of popular recreation.

27. Educational tracts, or a series of short essays on topics of immediate practical importance to teachers and school officers.

28. Educational biography, or the lives of distinguished educators and teachers.

29. Educational benefactors, or an account of the founders and benefactors of educational and scientific institutions.

30. Self-education, or hints for self-formation, with examples of the pursuit of knowledge under difficulties.

31. Home education, with illustrations drawn from the family training of different countries.

32. Educational nomenclature and index, or an explanation of words and terms used in describing the systems and institutions of education in different countries, with reference to the books where the subjects are discussed and treated of.

The series, when complete, will constitute an *Encyclopedia of Education*.

APPENDIX I

(Dr. Barnard's plan in 1862 for a new series of the *American Journal of Education* (Vol. XXI.))

With the number for March, 1862, we shall commence a new series of the *American Journal of Education*, and, with a moderate encouragement from the thoughtful and active friends of educational improvement, we shall continue our quarterly issues, until

they have reached at least six volumes. We shall make no change in the general plan of this periodical. It will be devoted, as from the start, exclusively to the history, biography, science, art, systems, institutions, and statistics of education in different countries, with special reference to the condition and wants of our own. We shall studiously avoid the insertion of all papers foreign to these great subjects, or of a single line or word calculated to injure the feelings of any faithful laborer in any allotment of the great field of American education. We leave the work of controversy to those who have more taste for it than we have, and shall labor diligently on the following points:

I. The history of pedagogy, or the successive developments of human culture, both theoretical and practical, under the varying circumstances of race, climate, religion, and government, as drawn from special treatises of teachers and educators in different languages, or as embodied in the manners, literature, and history of each people.

In the development of this great theme, embracing many ages, races, and governments, we propose, not in precise chronological or ethnological order, but in papers prepared from time to time, as our studies or those of our co-laborers may suggest, to show, to an extent which has not yet been attempted in the English language, what has been accomplished in the family and schools, by parents, teachers, and educators, for the systematic training of children and youth:

1. In the eastern nations, before the birth of Christ—in China, India, Persia, Egypt, and Palestine—by Confucius, by the Vedas and Buddha, by Zoroaster and the Ptolemies, by Moses, David, Solomon, and the Rabbi.

2. Among the Greeks, at Crete, Sparta, and Athens, under the institutions of Pythagoras, Lycurgus, and Solon; by poets and philosophers and teachers, by Homer, Socrates, Plato, Aristotle, and Plutarch.

3. Among the Romans, in the infancy, maturity, and old age of Rome, by the didactics of Cato, Seneca, Tacitus, the Plinies, Quintilian, and Lucian.

4. Among modern nations, as reached by the teachings of Christianity, in the gradual unfolding of the present received ideas of school organization, and of the principles and methods of instruction, through (a) the peculiar organization and distinctive teaching of the early Christians; (b) the first popular school of the Christian Fathers, Chrysostom and Basil; (c) the catechist schools of Clement and Origen; (d) the seminaries and cloister schools of Tertullian, Cyprian, Jerome, and Austin; (e) the monastic institutions of Benedict, Dominic, and Francis; (f) the court schools and educational labors of Charlemagne and Alfred; (g) the modifications wrought by Arabic culture which followed the incursions of the Moors; (h) the rise and expansion of universities; (i) the demand of chivalry for a culture for man and woman distinct from that of the clergy, and of incorporated cities for schools independent of ecclesiastical authorities; (j) the revival of the languages and the literature of Greece and Rome; (k) the long-protracted struggle between humanism and realism; or between, on the one hand, the study of languages for the purposes of general culture and the only preparation for professions in which language was the great instrument of study and influence, and, on the other, the claims of science, and of the realities surrounding everyone, and with which everyone has to do every day, in the affairs of peace or war; (l) and the gradual extension and expansion of the grand idea of universal education—of the education of every human being, and of every faculty of every human being, according to the circumstances and capabilities of each.

While thus aiming to give in each number contributions to the history of pedagogy and the internal economy of schools, we hope in this series to complete our survey of:

II. Systems of national education, and especially an account of public schools and other means of popular education in each of the United States, and of all other governments on the American continent.

III. The history and present condition of normal schools, and other special institutions and agencies for the professional training and improvement of teachers.

IV. The organization and characteristic features of polytechnic schools, and other institutions for the education of persons destined for other pursuits than those of law, medicine, and theology, including a full account of military schools.

V. The history and courses of study of the oldest and best colleges and universities in different countries.

VI. The life and services of many teachers, promoters, and benefactors of education, whose labors or benefactions are associated with the foundation and development of institutions, systems, and methods of instruction.

HENRY BARNARD.

HARTFORD, March, 1862.

APPENDIX J

(From Dr. Barnard's preface to his *American Journal of Education*, 1856, explaining the history of his plan.)

The plan of a series of publications, embracing a periodical to be issued monthly or quarterly, devoted exclusively to the history, discussion, and statistics of systems, institutions, and methods of education, in different countries, with special reference to the condition and wants of our own, was formed by the undersigned in 1842, on the discontinuance of the first series of the *Connecticut Common School Journal*, commenced by him in August, 1838. In pursuance of this plan, several tracts and treatises on distinct topics connected with the organization, administration, and instruction of schools of different grades, and especially of public elementary schools, were prepared and published, and the material for others was collected by travel, correspondence, purchase, and exchange.

The further prosecution of the work was suspended in consequence of his accepting the office of commissioner of public schools in Rhode Island, but was resumed in 1849, on his resigning the same. In 1850 the plan was brought without success before the American Institute of Instruction, at its annual meeting at Northampton, in connection with an agency for the promotion of education in New England. Having been induced to accept the office of superintendent of common schools in Connecticut, for the purpose of re-establishing the educational policy which had been overthrown in 1842, the undersigned undertook to carry out his plan of publication by preparing a series of reports and documents, each devoted to one important subject, under authority of the legislature. In this connection "Practical Illustrations of the Principles of School Architecture," "Normal Schools, and Other Institutions and Agencies for the Professional Training and Improvement of Teachers," and "National Education in Europe," were prepared and published. Finding that the anxieties and labors of office, combined with that general correspondence, and special research and reflection, which the completion of the series required, were too much for his health, he resigned his office, and addressed himself to the execution of the latter. Failing to enlist either the Smithsonian Institution or the American Association for the Advancement of Education in the establishment of a central agency, the undersigned undertook, in March, 1855, on his own responsibility, the publication of a *Journal and Library of Education*. Arrangements were accordingly made, in April, to print the first number of the *American Journal of Education*, in connection with the publication of the proceedings of the association for 1854, to be issued on or before the first of August, 1855.

*EDUCATIONAL LESSONS OF THE PARIS EXPOSITION
IN 1900*

MISS ANNA TOLMAN SMITH, BUREAU OF EDUCATION, WASHINGTON, D. C.

The education section of the Paris Exposition was crowded with material, but in the midst of it one seemed to be moving in a world of ideas—æsthetic, educational, and national. These ideas were not separately expressed, but, as it were, pervaded the exhibits. The first arose from the disposition of the material and the decorative schemes employed. Here the United States achieved a signal triumph. Says Dr. Compayré: "Nothing had been neglected which could give the school exhibit of the United States the impressiveness that it merited." He notes the "coquetish" installation, the "light and graceful façade," whose exterior panels presented imposing views of the Boston Institute of Technology.

Effect alone counted for so much in that æsthetic city, and in an exhibition distinguished thruout by its artistic finish, that the English director, dismayed at the prospect of failure in this respect, was ready to withdraw his material, an impulse which he wisely restrained. It was, however, educational and national ideas as expressed by the material that affected the judgments of the jury on elementary education, and it is from the standpoint of this body that I shall consider my subject.

It was naturally presumed that the educational element would outweigh all others with the jury, and one who knew its personnel could easily anticipate the critical and comprehensive nature of its examinations. Of the twenty-three members fifteen were French, and, with few exceptions, experts identified with the service of public instruction. Their solid majority gave great importance to their points of view and their standards. I hasten to add that, considered as a company of experts, the jury was saved from narrowness by the philosophic spirit of M. Buisson, who, of all the schoolmen in France, best comprehends the educative value of the ideal, by the unbiased judgment of the English members, and by the broad sympathies of the Russian.

In a week of preliminary examinations before the jury meetings began, my attention was drawn naturally to the exhibits of France, Great Britain, and the United States. They typified in a striking manner, altho in varying degrees, the two principles which control all school work—life and system. In the French section one felt the excess of system; in the English section the living principle was obscured by the lack of system; in the United States system appeared merely as the expression of life. These were not superficial distinctions; they ran thru all the material and gave to each exhibit its national stamp. Other nations also revealed something of their peculiar quality thru exhibits, but to a less marked degree than the three named. Hence these made the deepest impression, and furnished the measure for the others.

The American exhibit was the most novel; it was this in a double sense. It showed to Europeans ideals totally unlike their own, and it showed school work unlike anything ever put on exhibition under that head. The excess of novelties of the second kind raised a momentary apprehension that the more conspicuous features of our exhibit might obscure what was of deeper import. Pictorial representations, which were lavishly employed, give an adequate idea of school buildings and equipments, and a vivid sense of school life and activities; but, on the other hand, only subordinate exercises, as manual training, physical culture, or the inferior processes of training that relate to the sensuous view of things, can be presented by this means. So, too, it must be said of detached specimen exercises, which also formed an important feature of our exhibit, that, however excellent in themselves, they are mere fragmentary hints of little value, unless their rationale is shown by a systematic process of which they are a part.

The winged frames, or flying albums, proved a happy device for exhibiting specimen exercises, and by themselves were adequate for very complete presentation of the kindergarten in which formal instruction has no part. The fundamental difference between it and the French infant school (*école maternelle*) could be seen at a glance. The kindergarten claims the whole being, and leads to spiritual harmony and freedom thru the social and artistic impulses; the infant school is kindly in spirit, but in too great haste to fit the child for practical life, and thus unconsciously, as it were, begins with the infant the narrowing work of specialized training. The difference was seized at once by the French jurors, and one member was commissioned by the director of primary instruction to make a special report on this part of our exhibit with a view to modifications in the infant schools.

As we advanced beyond the kindergarten, the album exhibits became less and less adequate to satisfy the very inquiry which they raised. For example, the specimen exercises showing the efforts of primary pupils at correlating subjects, as number work with drawing and language, were greatly appreciated as a means of exciting the interest of children and even of correcting the effects of excessive formality in teaching. But the suggestion that they promoted either the mastery of subjects or the synthetic activity of mind was received with incredulity, and only excited a desire to see our mode of dealing with a subject in its entirety. This necessitated examination of the volumes of pupils' exercises showing the development of subjects from grade to grade of the school life. Efforts at correlation were noticeable in higher grade work, but it did not appear that the principle had been consistently developed or forcefully applied in the more advanced work. On the whole, this particular class of exercises left, I think, the impression of an ingenious device rather than of a fruitful principle, and did not weaken the confidence of the

French members in that more formal and analytic training of which they are past masters.

We showed a goodly amount of scrap-book work, especially in geography, which brought together miscellaneous information—biographical, commercial, historical, literary—centered around the particular locality that formed the subject of the exercise. This indicated, doubtless, a great deal of independent effort on the part of pupils, but it was in striking contrast with the more scientific treatment of the subject pursued in many foreign schools. The French, for example, usually begin geography by attention to a small circle of local features and advance by a sort of spiral process thru a wider circle of observations to formative processes, embracing at last the resulting conditions in the communities and activities of civilized life.

When I heard a half-whispered discussion to the effect that the scrap-book work was too *morcelé*, I had the satisfaction of showing also systematized courses in this subject which, if they did not roam so far as the scrap-book work, penetrated to the deeper unities of nature and humanity. I thought the French paid too much attention to local details, cultivating observation at the expense of imagination. Our teaching, I should say, is more stimulating in the latter respect, and certainly imagination plays a great part in the mastery of all science.

The exhibits of the United States and of France were distinguished above all others in that they showed systematic method as well as results of instruction. The great aim in French teaching is the logical treatment of the subject. This was evident from the innumerable theses exhibited by the normal schools and by primary-school teachers, discussing and illustrating the mode of unfolding a proposition or a lesson.

The general notion of method is impressed upon the normal students by the very nature of their own instruction. Their teachers are specialists who have mastered their subjects and have the French genius for formal and lucid presentation. The normal students imitate these living models, and from them the notion of form passes on to the children in the primary schools, whose exercises reflect with amazing precision the order and finish of the original lesson.

Our work, on the contrary, showed an unmistakable regard for the psychologic state or the order of mental growth. Hence our great advantage in dealing with the beginnings of knowledge that relate themselves particularly to sense-impressions; as ascent is made to the stage of pure mentality or ideation at which the mind develops thru its reflective activity, a degree of uncertainty both in method and aim was noticeable in our work. It is much easier to detect this in comparing exercises performed by pupils of the same age in different countries than to give set proofs of weakness in this respect, or to indicate the whence or how of the weakness. It seemed as if, in our efforts to excite the free activity

of the child and to save him from slavish dependence upon authority, we were losing faith in that long seedtime during which mere knowledge, as such, comes to fruition thru the mind's appropriation of it. I felt this after looking over some of the literature work of grammar grades, in which children struggled to give formal expression to their ideas on some masterpiece which they had studied. The apparent intention in such cases had been to draw out from the children the reflections or the feelings which the work had excited in them. They were not repeating the words of a book. It was none the less evident, however, that the ideas were chiefly second-hand. They were only less admirably expressed than if memorized in the words of a literary critic, after the manner of innumerable bits of choice criticism faithfully reproduced in the French exercise book. To find the true measure of juvenile power in this respect one had only to cross to the English section, where essays on Tennyson could be seen marked by the brevity and the crudity which stamp the production of a mind in its teens as unmistakably its own. I fancied, too, that the delusion of spontaneity was being fostered among us by the device of oral instruction, and that an extravagant regard for interest had led to amateur and capricious methods of dealing with subjects. In the land of Rousseau we seemed to be more truly his followers than are his own countrymen.

The abundance of class work exhibited and the printed programs and reports made it possible for the jury to grasp the true spirit of our instruction. Those who judged solely by the more graphic modes of exhibition gained only a superficial view. This is evident from the general tenor of their reflections. Says Dr. Compayré: "What strikes us in looking over the work of the pupils is the predominance of concrete over abstract subjects;" and again: "What strikes me as particularly excellent in elementary instruction in the United States is manual dexterity as shown in penmanship and drawing." "The great object of American schools," says an English observer, "appears to be the training of hand and eye." These, and other similar opinions that might be quoted, show an utter failure to comprehend the distinctive character of the public schools of our country. They have aimed, above all things, at intellectual freedom, and it is their glory that they have developed in average people the power of abstract thought and raised them to the intellectual plane where things and events appear in their proper subordination to principles and ideas. Herein, also, appears the fundamental distinction between our own schools and the primary schools of France. We may learn from the latter many lessons of method, we may gain from them useful hints in the endeavor to secure a higher average of measurable results from all the schools of the country, but as regards the great ends of primary or popular education our convictions are their tantalizing dream.

The English exhibit showed little of either system or method, but for

this reason it was the more typical. It emphasized a saying of Michael Sadler that "almost every school in England is a type by itself, the embodiment of an idea which to be understood must be studied in its genesis." This is especially true of the secondary schools, which are generally meant when English national education is discussed; but it is true to a degree also of the public elementary schools. Under this head were grouped infant exercises and advanced work in algebra and geometry, in Latin and French, from the higher-grade board schools of London, Birmingham, and other cities, which by a legal evasion are elementary, tho engaged on secondary subjects. When I asked for examples of the best methods in elementary education, the English director showed me exercises from private schools which prepare boys for colleges, like Eton and Harrow, and which were classified with them. This was confusing, tho significant of social distinctions which are never ignored in England.

The English exhibit was marked also by the absence of typical methods, that is, methods of instruction reflected in the work of pupils. Even the art work of English schools has lost that uniform character which once betrayed the overshadowing influence of South Kensington. In England, as in the United States, there is a return to nature for models and motives, altho this movement in England has not entirely supplanted the conventionalized art, nor has it yet attained the unity of idea and procedure noticeable in our own art training. I saw excellent work in every branch of study from English schools, and I saw honest poor work of a kind that may be found in other countries, but which was not shown at Paris. But seldom did the work convey any hint of the method by which the subject had been unfolded. In this general absence of pedagogical uniformity, the one common characteristic of all the English school work, good and mediocre, stood out in bold relief. The stress of English training falls upon the will. The average result is not so high as in France and the United States, nor are the varied kinds and degrees of ability so fully provided for, but the force of the individual is conserved. The work from the Scotch schools appeared to be more uniform than that from the English, but it was not the French uniformity. It bore the English stamp of sturdy independence. This came to me with peculiar impressiveness, for I recognized in it a striking likeness to the efforts of my own old school days in New England. The new education has a more liberal spirit and, possibly, a richer content, but the old struck with unerring judgment the central truth of human nature, that will is power—that truth England re-echoes today.

Notwithstanding the close examination of the educational features of the exhibits, it soon appeared that the jury would give greater weight to national considerations. This was implied by the choice for president of an accomplished diplomat like M. Bourgeois. Twice minister of education

at critical periods in the recent history of France, and her representative in various foreign services, notably at the Hague conference, he well understood how to preserve the balance between contending interests. The jury rules required that a foreigner should fill the vice-presidency, but the choice of an Englishman for the position was a stroke of diplomacy. What stronger proof of international candor and universal good-will was possible under the circumstances?

There are, however, other than diplomatic reasons for giving weight to national considerations in such a case. Every nation has aims and conditions peculiar to itself, and its schools should be judged in relation to these, rather than in comparison with those of other countries. In this view feeble efforts at popular education in countries like Italy, Portugal, and Russia, where the idea is little more than a patriotic hope, may properly be rated, as they were, above their intrinsic value.

The keynote of national enthusiasm was struck in the first foreign exhibit that we visited, the Hungarian, where M. Béla Ujváry explained in glowing terms the growth of the national influence in primary education. Signs of national initiative were apparent, also, in certain departures from French models; for example, in the freer spirit of the Hungarian infant school and the admission of girls to classical studies.

It was in the large national perspective that the anomalies of French public education became intelligible. The word "primary," in the French use, characterizes an entire system of education intended for the common people. It is thoroly permeated with the industrial idea, bound hard and fast to the particular and the limited. Across the corridor was a display of the culture schools, the *lycées* and the universities, for the directive and professional classes. These schools aim at intellectual detachment from the immediate; they lift man to the sense of his ideal self by unfolding before him the grand spectacle of human history and human achievements, the deeds by which he has proved himself master of his environment and of his destiny. This distinction between the primary and culture schools seemed a puzzling contradiction in a republic that by an inscription on every schoolhouse proclaims liberty, equality, and fraternity, a grand community of ideas, as the end of national education.

But viewed in the great movement of French history, the primary system, with all its limitations, is seen to be a necessary stage in the progress of the republic. By a singular neglect Napoleon omitted primary education from his imperial university. Hence the republic found here a free field for the exercise of its authority. Moreover, it came into existence when the scientific impulse had turned attention from speculative theories of man's nature and destiny to the immediate acts of his being and conditions. The leaders in the educational work were imbued

with the revolutionary doctrines. They believed in individual rights, they dreamed of the return to nature, but these doctrines had assumed with them an aspect unknown to Rousseau and the eighteenth century. They no longer contemplated the individual merely as such, but as the unit of a social order, and inextricably involved therein. Furthermore, the leaders in education were practical men facing an actual situation. Upon them was placed the responsibility of getting the children of the people into the schools which the government had lavishly supplied. In their endeavor to break up the church control of education, they appealed to the industrial classes by their desire for material good.

Thus the prevailing philosophy and an urgent necessity combined to make the primary schools of France positive and practical. All the teaching has this character: it is positive, but in the scientific rather than in the dogmatic sense, and practical, not in the large sense of making the most of the individual, but in the sense of giving him an intelligent view of his surroundings and skill in their use.

But a change is taking place in the spirit of the French primary school. An immense impetus has recently been given to moral and civic instruction. These subjects were, indeed, placed at the head of the program in 1882, but for a long time they found only formal recognition. Suddenly they have become the central subjects. Everything else is subordinated to them or permeated by them. They are not to be taught in a cold, didactic spirit, but in a manner to excite the imagination and the heart. In the official instruction the teacher is urged to inspire in the child the same regard for the notion of God as is excited when it is brought to his mind under the different form of religion. "Teach the child," says the ministerial circular, "that the sincerest form of homage to the divine is obedience to the laws of God as they are revealed to his conscience and to his reason." Thus the ideal self is exalted above the material self. Insensibly, also, the teacher is drawn to a fuller appreciation of the child's nature; for to children the ethical, the ideal in all its aspects, is much nearer than the material and the industrial. The child's mind is not scientific in its action, but philosophic, in a naïve sense of the word, and the school is most effective when it approaches him through his innate sympathies.

That I do not exaggerate the fact or the significance of this movement in the French schools must be evident to anyone who saw the effort of the French jurors to bring this part of their work to our attention, and their intense satisfaction in the award of a grand prize for their general system of moral instruction.

Along with this subtle transformation in the spirit of French primary education there is manifest a renewed desire to unify the primary and secondary systems. The hopelessness of previous efforts in this direction arose from the opposing views of education embodied in the two systems,

but in proportion as primary education becomes more internal in its purposes, as it relates itself more and more to the ideal possibilities of human nature, the obstacle to this union diminishes.

This reaction against the lower utilitarian type of primary school is a striking lesson for us at this moment. It refutes by the cold logic of fact the notion that the best school for a free people is the school that forces their thoughts forever in the industrial groove or in the narrow circle of immediate interests.

It was as a revelation of national ideals that the education exhibit of the United States made the most profound impression. The limitations of space had favored us. Forced to be typical instead of elaborate, and to follow a classification which ignored geographical boundaries, the exhibit revealed in a striking manner the common elements that pervade all our state and city systems. As we passed from alcove to alcove, which carried the school work on by insensible degrees from the lowest to the highest order, all felt the indwelling principle of unity working onward and upward from the kindergarten to the university, and everywhere working toward external likeness. In this comprehensive view our school exercises took on a deeper meaning. We do not, in the earlier stages, aim at the impartation of stores of well-ordered information, but at the development of power. The idea was emphasized by the statistical charts showing the progress of education in the United States during twenty years. They comprised all classes of institutions; they implied bonds of union between them all; they showed, by the ever-lengthening period of school life and the ever-increasing attendance upon the high schools, our belief in a long formative period for the child, and in a common heritage of liberal education for all classes. To the French the lesson came like a sudden realization of their cherished dream, but it came with no less force to the more conservative English mind. This fact is sufficiently attested by the extraordinary effort which resulted in the transfer of our material to Manchester. There it stood as an eloquent object-lesson to the men who must guide England in the present educational crisis. It showed the possibility of developing system from diversity without the loss of that local freedom which is cherished alike in this country and in England. It expressed the deep conviction of our people that technical or specialized training should rest upon a broad basis of general culture. Above all, it revealed the orderly impulses and rational intentions which give stability to our national life. Thus at Paris we achieved a triumph, we charmed the eye, we touched the imagination, we imparted lessons which wise men are pondering; but there were also lessons for us to learn. We were not in all things first and best. If such had been our record, nothing would remain to us in future expositions but to write above our vacant education section, "*hors de concours*"—"beyond competition."

*LESSONS OF THE EDUCATIONAL EXHIBITS AT PARIS
IN 1900*

HOWARD J. ROGERS, DIRECTOR OF EDUCATION AND SOCIAL ECONOMY,
UNITED STATES COMMISSION TO PARIS EXPOSITION

Mr. President, Ladies and Gentlemen :

In discussing this topic, I am under the disadvantage of having twice before been on record concerning the educational features of the Paris Exposition ; once in the *Outlook*, and once at the meeting of superintendents in Chicago last February. I may, therefore, be compelled to depart from Shakespearean ethics and repeat, in substance at least, some things that may have been said ; for, naturally, what seemed to me to be the chief educational features of the exposition would be the foundation for some of the lessons to be drawn therefrom.

"Lessons from the educational exhibits at Paris!" These are quite likely to be as valuable when drawn from negative as from positive sources. Those things which we do not have, and cannot introduce into our educational system, are as oftentimes matters for self-gratulation as otherwise. The comparison of educational methods of countries goes deeper than curriculums, methods, or administrative machinery. It comprises the history of the people, their temperament, their traditions, and the spirit of their institutions. It is the outcome of all these. Education is the embodiment of the spirit, the aspirations, and the compromises of a people.

We speak trippingly at times of comparing educational systems. But do we always realize what we mean ?

We may have in a locality a fine series of schools, well equipped, well manned, a matter of pride to the people ; we may multiply this community by as many towns and cities as there are in the country, but this does not make a national system ; nor will a study, on the part of a foreigner, of this well-regulated and well-oiled machinery enable him to obtain a comprehensive grasp of our educational life. Education is a broad term, and means not only the mechanism of instruction, but the national life outside the schools, that vital intelligence of a people which maintains its institutions and establishes its ideals. How far, then, we can deduce anything of practical value from the study of foreign school systems that will be applicable to our own system depends upon our ability to assume the view-point of the foreigner, and to estimate the hereditary and acquired tendencies of the people.

From this standpoint the comparison of school systems becomes not only a comparison of methods, but a study as well of social and political conditions and their development.

The nations which presented at the Paris Exposition an educational

exhibit complete enough to warrant analysis were the United States, England, France, Russia, Hungary, Japan, Sweden, Belgium, Spain, and Italy. Of these the last four may, for the purposes of this discussion, be omitted. They either contained nothing that could be of use or warning to us, or else what came under the latter heads are included as well in the exhibits of the other nations.

The feature which overshadowed all others in prominence, and which, by its dominance in every exhibit, characterized itself as the foremost educational thought in every foreign country, was industrial education. Whether it came from England, where it appeared in tentative, individual, and irregular forms; or France, where it has reached, under government statutes and municipal control, its highest development; or Hungary and Belgium, where the French dictum is law and the French influence paramount; or Japan, where it is directed rigidly toward those industries which make the wealth and trade of the nation, the object is to train the children of the masses for the trades and crafts which they will pursue thru life, and to minimize the time within which they can become wage-earners and producers of wealth.

My colleague, in her able paper, has set forth the tendencies in Class 1 of the exposition classification, elementary education. With her deductions I fully agree. The only other one of the six classes which bears directly upon the subject of industrial education is Class 6, industrial and commercial education. The peculiarities of the French system of education, upon which the exposition classification was based, must be borne carefully in mind. Primary instruction, which is the only free education, covers the ages of six to thirteen and sixteen years. Secondary education is entirely distinct from our understanding of the term, and has absolutely no connection with primary education. The course covers the ages of eight to twenty, requires a nominal tuition fee, includes in its curriculum the liberal culture of the humanities, and prepares for the highly specialized university courses. Class 3, superior education; Class 4, art education; and Class 5, agricultural education, are synonymous with our own terms, and need cause no confusion.

The industrial and commercial education included under Class 6 is, so far as France is concerned, the outcome of twenty years of statutory enactments, and of practically twenty-two years of agitation, since it was the dissatisfaction with the exhibit of the French schools at the Paris Exposition of 1878, in addition to appeals from chambers of commerce and large manufactories on the decline of technical skill, which brought about a serious consideration of the subject by the government.

The history of the development of the movement and the struggle between the ministry of public instruction and the ministry of commerce and industries is too long and intricate for repetition here, but the culmination of the controversy came in 1892, when the *écoles pratiques de*

commerce et d'industrie were established entirely under the jurisdiction of the minister of commerce and industries. These schools are in no sense comparable with the *écoles primaires supérieures professionnelles*, established under the law of 1880, and referred to in the previous paper, with the exception of the three in the city of Paris, viz., the Écoles Diderot, Boulle, and Estienne. The latter three entirely outclass the *écoles professionnelles* in the provinces, and are in reality trade schools maintained and supported by the jealous care of the communality of Paris. The *écoles pratiques*, however, differ from the *écoles professionnelles* in that the latter aim to give a certain amount of technical instruction as a preparation for apprenticeship, while the former aim to furnish clerks and workmen ready to take their places in the counting-room or workshop. A general education as a basis for the technical training is required, and no boy is admitted who has not fulfilled the conditions of the compulsory-education law. On the other hand, in the language of the minister of commerce: "It is essential that special provision should be made at the present time for the requirements of industry and commerce." The situation, from the French standpoint, is well summed up in a circular issued by the minister of commerce, in June, 1893:

The keenness of international competition has revolutionized the conditions of trade. The wholesale use of machinery and minute subdivision of labor have practically extinguished apprenticeship in the workshops. Yet, in view of the constant changes to which machinery is subject, it is evident that there never was a time when it was so requisite that workmen should possess scientific knowledge, and should be thoroly versed in all the requirements of the workshop. It is the special aim of the *école pratique* to fill the void which now exists both in commerce and industry.

It is these schools wherein the work has been carried on enthusiastically, and under the spur of competition and rivalry, that contributed the exhibits under Class 6 of the exposition. The faculties of the schools demanded a separate building for the exploitation of their courses of study and the products of their workshops, and inasmuch as the ministry to which they are subordinate was also the ministry by which the exposition was organized and controlled, they naturally received it. For this reason the French exhibits in Class 6 were not found with the main exhibit of French education, but occupied an annex, on the west side of the palace of education. The excellence of this exhibit, the superior quality and finish of the workmanship, and that indefinable touch which characterizes French designing, were far ahead of any similar exhibit in the exposition. In fact, it was above competition. Its only rival was the work of the *écoles professionnelles* which was exhibited in the Ville de Paris building and covered practically the same field.

If, then, our industrial and social development as a nation demands highly specialized technical training, we have the experience of an alert and fearless nation as a guide. We have for observation the manual training thru all the grades of the elementary school, and the technical

training in the superior and practical schools. Their mistakes can be avoided, their successes adopted. But do our needs demand it? That is the question. The preliminary report of a committee of the Society for the Promotion of Engineering Education, made in New York last July, on "American Industrial Education : What shall it Be ?" is presumably the strongest expression to be found for the necessity of manual and technical training in our schools, inasmuch as the sympathies and work of the society are entirely in that direction. Yet nowhere do we find a statement that it should displace any portion of the liberal and cultural education which is offered to the pupils of our schools, but, on the contrary, it is distinctly stated that it must be entirely supplemental to the mind-informing and mind-developing education. Lest there should be any misunderstanding, there is set forth in italics the sound doctrine that "in America all schooling should lead primarily to the elevation and development of the individual, and only secondarily to a greater material prosperity."

The committee further frankly states its inability to agree on the extent to which industrial training should be introduced in the various grades of schools, but confines itself rather to a discussion of the schools wherein all are agreed it should find some place. If, then, a committee of specialists cannot agree on this point, there is little likelihood that the great body of schoolmen will do so. There is probably little desirability that they should do so. Such a consensus of opinion would argue an industrial condition in this country which we do not want to contemplate. The unanimity of France is the last resort of France. We prefer that variety in occupation which accompanies abundance of wealth and opportunity.

The conditions in the United States do not require, nor do our people demand, that there shall be in our courses of study a dominant tendency toward any particular phase of industrial progress. In the European countries the children of the working classes are destined from their earliest years to pursue the occupation of their fathers, and it is only the unexpected which permits them to escape it. With us it is impossible to assign to any child his father's occupation. To attempt to do so would meet with resentment and failure. The conditions which govern our growth and development prevent the possibility of a perpetual or hereditary working class. Such a state can exist only in an old and stratified civilization, where all chances of sudden wealth and preferment have been exhausted, and nothing remains for the masses but to attain the highest possible industrial skill in the arts and trades. This is the rock on which every attempt to adopt foreign methods *in toto* in American systems must go to wreck. There is no common basis for adjustment. The differences are fundamental and incident to the different theory which underlies the spirit of popular education in the Old World and the New.

A freedom and elasticity is demanded in the educational system of our country to correspond to the possibilities existent in our material development. For this reason we have felt no marked sense of inferiority for the public schools of our country because they did not have this French machinery, or that German method, which has upset the equilibrium of many of our domestic critics. For the certainty exists that the same machinery which runs so smoothly and adaptably to the educational voltage of one country may be completely wrecked when applied to another. Minor details, special features, and surface polish are easily copied from one system to another, but the real education of a country is too deeply rooted in the soil of heredity, politics, and precedent to stand much transplanting.

Class 2, secondary education, was not as fully developed as any of the other classes, probably for the reason that it represented an older and longer established curriculum, embracing the classics, and therefore containing less of novelty and experiment for display and criticism. In the English exhibit this grade of work was practically confined to the great preparatory schools, inasmuch as the education department had little but the new law of 1899 and its proposed workings to exhibit.

Sweden presented an attractive exhibit of the work covered by the classical and real schools, the course covering nine years, and preparing for the universities or special schools. An interesting feature was the work assigned to pupils in languages and arithmetic for the vacation period, and in which an examination at the beginning of the term is necessary to determine the pupil's status in his class.

In the French and Belgian sections care was taken to fully exploit the scope of the secondary studies. In the latter the programs show a marked increase in the time devoted to science and mathematics, and a corresponding decrease in the time given to Latin and Greek. The French secondary system was brought out in strong relief, and the two distinct types of instruction differentiated—the classical, characterized by the study of ancient languages; and the modern, characterized by a more complete study of modern languages and sciences. A strong analogy was noticeable in the secondary-school work of both of these countries with our high-school and academic work. In the former, however, the language work is much better done than in our schools, while the science work, on the contrary, is much inferior. The laboratory equipment of many of the *lycées* would be condemned off-hand by any progressive school board in the States.

In Class 3, higher education, the chief lesson to be drawn was one of loyal satisfaction at the thoro work done in our own institutions. Comparisons are not necessarily odious, and are oftentimes conducive to a proper self-respect; and while disclaiming any idea of "letting the eagle scream," I can positively assert that no foreign universities showed better work,

equipment, or results than our own. The biological research of Johns Hopkins, the astronomy of Harvard, the palæontology of Yale, the engineering of Cornell and Massachusetts Institute of Technology, the law of Harvard, the medicine of Columbia, the extension teaching and physics of Chicago—all of which are thus mentioned because, under our plan of exhibit, these institutions prepared these specialties—were conceded by experts from every nation to be the equal of anything that Europe could bring forth. And why should it not be? Certainly, after eight years of elementary work, four years of secondary work, and four years of college work, the American student takes into his university work a broader knowledge and a maturer and stronger mind than is possible in the product of French secondary instruction or of the German gymnasia. I don't know that I should mention the German university, as from the title of this paper, and the total absence from the exposition of all German education, they would seem to be barred. But we may as well be honest and assert the fact that the Mecca of the university student is tottering, and that in this, as in other matters, the "star of empire will westward take its way." Andrew D. White, ambassador to Germany, said to the University Club of Syracuse last November that thirty-five years ago the universities of this country had no standing beside those of Germany, but that today there are departments in which the universities of this country equal or excel those of Germany; and predicted further that in twenty years men will come to the United States for advanced study.

United States Consul Hughes writes: "Why should every German degree be accepted by our state medical boards, or at least by most of them? Medicine and surgery stand today on a higher plane in America than here."

In the English universities there has been no appreciable change in entrance conditions, and they have clung tenaciously to their old and conservative standards. It is not generally realized in this country that the entrance requirements for Harvard, Yale, or Princeton are far in advance of those for Oxford or Cambridge.

Our universities are a cause for pride. I am not a prophet or a son of a prophet, but I am willing to hazard the assertion that some of us will live to see the day when to secure a degree at a foreign university will be to confess that it is desired at a lesser cost than it could be secured at home.

In Class 4, art education, there was nothing to do but to acknowledge our deficiency and pray for strength. There is but one true home of art, the rest are imitations. The development of thoro artistic taste in a nation is the growth of centuries. It cannot be hurried, bought, or forced. The making of our country and the development of its native resources have required too close attention to permit artistic growth. What might have been bequeathed to us by England had not Puritanism

blighted English industrial art is problematical. But with the founders of our nation antagonistic, or indifferent, to artistic forms, what might have been a reasonable growth for a new country was seriously retarded. We are at present the most faithful pupils and imitators of French art. Paris is the school of our artists, the critic of our work. The art jury, with Chipiez at its head, in examining the architectural drawings of the United States exhibit, commented in a pleased manner on the evident influence of the French school. What particularly struck them in our free-hand drawing was boldness of outline and strength of treatment, and, in seeking for the reasons, the object-drawing of our elementary grades was freely accepted as a potential factor. Our color work, however, was subjected to severe criticism as inharmonious and often glaring.

In Class 5, agriculture, the United States exhibit, which was to have been installed in the agricultural section, was a failure, owing to a misunderstanding arising in the committee on experiment-station work. Consequently a class in which we might have shown most advanced processes was, but for the masterly monograph of Dr. Dabney on the subject, left practically untouched. A portion of the French agricultural exhibit from which we can draw the greatest profit was tree-culture. I don't mean shrubs, or plants, or vines, but trees. The planting, the caring for, and the transplanting and preservation of large trees are much neglected here. If a tree is in our way, we cut it down; in France, if a possibility, it will be transplanted to some place where it is needed. This was well illustrated on the exposition grounds. In preparing the Champ de Mars and Esplanade des Invalides for the large buildings, many hundred trees ranging, I should judge, from six to twelve inches in diameter, were taken up and replanted in the Bois de Boulogne, three miles distant. I saw them flourishing there like a small forest. When the buildings disappear and the parks are restored, the trees will be taken up and replaced in their original positions. Thruout France the care of trees is a principle thoroly grounded in the minds of the people.

An interesting minor feature of the Belgian exhibit—minor only because it did not affect the methods of instruction—was the medical inspection of communal schools. In addition to the sanitary inspection, and the regular visits which an appointed staff of medical inspectors makes, at least once in ten days, to each school, a dentist visits the schools at regular periods and cares for the teeth of the children. The effect which this has on the general health and attendance of the pupils is most marked.

In the matter of school equipment, schoolbooks, school appliances, and school devices, no foreign nation could approach the United States. Convenience with them is a secondary consideration. I could scarcely convince the jury that the prices quoted for desks in the school-furniture exhibit were regular trade prices. In the city of Paris, in none of the

schools which I visited did I see what would rank in this country as a well-equipped class-room. In one famous *lycée* I recall particularly an antiquated, painted blackboard, where the marks were erased with a cloth. I gave to one school principal a dustless eraser, which he took home to show as a curiosity. So, in the matter of text-books, the large type, fine paper, clear illustrations, and durable binding of our American editions were matters of the greatest interest and favorable comment throught the exposition period.

The Exposition Universelle of 1900 was a great school, which had its lessons for all nations. It was a school of effort, a school of progress, a school of commerce, and a school of peace. France has never failed to profit from lessons taught by international expositions. Why should we? Surely it is not vainglory, nor a desire simply to outshow other nations, which leads to the enormous expenditures involved in every international exposition. It is rather an honest competition of the best that each nation can produce, brought together in the hope of its proving a benefit and necessity to other nations, and in the further hope of finding something of reciprocal value and interest to itself.

So far as the benefits of the educational exhibit are concerned, I hope I may be pardoned if I did not bring back a basket overladen with suggestions and innovations. Frankly, I think the greatest lesson which the schoolmen of the United States can draw from the Paris Exposition is contentment. Pray, do not misunderstand this word. I do not mean that we have everything we ought to have; far from it. But, rather, that there is little new in foreign education that we need to have. We have a strong, virile system of schools, colleges, and universities, intrenched in the love of the people and built to meet their necessities. Let us not jeopardize it by introducing those features adapted to a state of society to escape which this country was founded.

At a luncheon given, as it happens, by the distinguished foreign gentleman who is to address you later in the week, there were among the guests an ex-minister of public instruction and an ex-director of primary education. In response to an argument put forward, the latter replied: "I object to the conclusion. In the United States, for example . . . ;" "Ah!" broke in the ex-minister, "the United States is never an example in point; the spirit of the people sanctions any advance; their institutions are totally different."

This impatient tribute is the keynote of the whole situation.

DISCUSSION

CLOUDESLEY S. H. BRERETON, Melton Constable, England.—*Mr. Chairman, Ladies and Gentlemen:* I wish to add my testimony to that of the gentleman who has just sat down, in favor of the thoroness and thoughtfulness of the two papers we have

just heard on the lessons to be learned at the Paris Exposition. I find myself, in fact, so much in harmony with so many views they have expressed that I feel sorely inclined to copy the example of a speaker who had once to follow the famous orator, Mr. Burke. Despairing of being able to improve on what Mr. Burke had already said, he merely rose and ejaculated: "I say ditto to Mr. Burke." Still, if I have no chance of improving on what we have already heard, there is still a useful rôle open to me. If I cannot break fresh ground, I can at least enforce and indorse the views which have been presented with such eloquence and lucidity. You are all well aware of the advantage of a second opinion for adding weight and importance to a particular set of views. My aim, therefore, will be to hammer in the conclusions already presented.

I am sorry to say a breakdown in the commissariat of my hotel deprived me of hearing more than half of Miss Smith's highly suggestive paper. Yet I think it would be difficult to imagine she reached a profounder point than that which she seemed to me to be setting forth when I came onto the platform. If I understand her aright, she seemed to me to be defining with wonderful penetration and felicity the fundamental ideas that lie at the back of the American, English, and French conceptions of education. Here in America it seems to me that the principal aim of the teacher is to increase the receptivity of the child, and with this idea in view everything is done to make the milieu or environment of the child as attractive to him as possible. You adapt, in school, the milieu to him in the hope he will later on adapt himself to the milieu. You are firmly convinced it is only necessary to bring a child to the waters of knowledge to make him freely drink of them, especially when you have explained that they are really the waters of knowledge. In this optimistic view of the child, which consists in giving him his head, as we say in England, you seem to me to have been largely imbued with the ideas of Rousseau and his favorite theory that man is born *foncièrement bon*, and only let his interests and appetites have full play, and he will find out instinctively the best road for himself.

The English conception, on the other hand, seems to me to be based on the more or less conscious belief that education is the training of the will.

The child is often set down alone with a text-book which he has somehow or other got to master; not infrequently he masters it badly, yet what he masters is his very own. The discipline is often stern. We see the word "must" peeping up out of it like a rock coming up to the surface. But the seeming harshness, the apparent disregard of the child's weakness, has also its philosophy, even if it is often unaware of it. It reminds one of the categorical imperative of Kant; it says "thou shalt, thou must," because its conscious premise, derived, not indeed from reason, but from the heart, implies the postulate "thou canst."

Different, again, seems to me the root-idea of French education. Here the appeal thrust out is to the logical instincts of the child. This passionate belief in an innate and perfectly comprehensible reason finds its expression in the teacher's attitude. His effort is to make things as clear as possible, to render them visible, patent, self-evident; hence all his teaching is cast in a logical mold; there is an almost mechanical inevitableness with which one proposition depends on another. At first the pupils seem rather to copy the teacher and take upon trust what he says, but the innate logical faculty within soon comes to life, and they begin to cast their ideas in a logical form and develop them in a logical order. One seems to see in them a sort of perpetual renaissance of the old culture—the coming to life of a culture that has become a sort of second nature and only requires the school to develop it. Certainly, anyone present at a lesson of French boys of fifteen and sixteen must be struck with their powers in the way of building up paragraphs and, indeed, whole compositions. This belief in the self-evidence of clear ideas clearly presented takes us surely back to Descartes and his restatement of the foundations of knowledge. It is, indeed, curious, but it seems to me that the more the French regard their so-called self-evident truths, the more they see the unity and oneness of them; whereas we English, the more we look into what we call self-evident, the less self-evident does it

become, because we begin to see it breaking up into countless and often discordant details under our eyes. The French mind is rather synthetic, ours analytic. The French takes in the forest; we are specialists in the trees.

There is also another point Miss Smith touched on, to wit, the reasons why the French republic decided to cast a sort of technical net over the whole of their primary education in order to divert the best of the elementary children into trade or industrial callings. To her admirable analysis I will only add one further factor. It seems to me one of the reasons worthy of mention was that the French, like many other older countries in which national expansion is slower than with you, and the chance of rising less, have already produced, thru a variety of reasons not to be enumerated here, a literary proletariat whose tastes have been sufficiently cultivated to unfit them for anything but professional work. To have directed the education of the poorer children toward these already overcrowded professions would have merely brought them up to starve at the gates of a paradise they could never enter. Success in professional life in France today demands, as an almost *sine qua non*, the possession of independent means.

Another most important point made by Miss Smith was her insistence on the seriousness of the ethical training the French are attempting to introduce into their schools. The famous reforms of Jules Ferry are probably well known to you. Certainly they speak volumes for the strength and vitality of the democratic spirit among the lower orders in France. They represent the reply of the republic to the gibe that she has changed in nothing the physiognomy of France. As far as they go, they are the true embodiment of the liberty, equality, fraternity of the Revolution. Probably the world has never witnessed a more astonishing revolution than the apparently successful effort to raise, lift, and shift the entire national education from a Catholic to a merely ethical foundation, and that, apparently, with no *net* loss to the education of the country, but with even a considerable gain. Such an astonishing feat can be paralleled only by the engineering exploits you sometimes attempt in America, when you raise a huge hotel upon rollers and transfer it to a new basis. Now, this ethical instruction is merely an attempt to "underpin" the old structure on its new foundation, and, as such, should have the sympathy of all.

Before I sit down you will, however, probably expect me to say a few words about American education. The last speaker very justly insisted on the extreme difficulty of exhibiting the most vital part of education, to wit, its atmosphere and influence on character. Well, thanks to the admirable order and arrangement with which your educational exhibit was put together, it is probable that the American exhibit explained to the ordinary visitor the real aims and ideals of the American schools better than any other exhibit. If you should ask me the effect it produced on me, I should say that the American educational army struck me as likely to be the most efficient in the world, for three reasons that I consider essential. First, it enjoys practically unlimited supplies. American democracy is ready to plank down its last sou on American schools. But, in addition to the sinews of war, you have also a thoroly effective force of teachers ready to go anywhere and do anything; and finally you have a leader of tried and rare efficiency; and how important a really competent leader is we learned to our cost in the early stages of the South African war. In Dr. Harris you possess the Nestor of educational leaders. This is not merely the opinion of a humble individual like myself, but that of the whole of the international jury at the Paris Exposition. When the name of Dr. Harris was mentioned for a grand prize, it was voted by acclamation, an honor accorded to no other person, and only vouchsafed to one or two institutions.

REPORT OF THE COMMITTEE ON A NATIONAL UNIVERSITY

WILLIAM. R. HARPER, PRESIDENT OF THE UNIVERSITY OF CHICAGO,
CHAIRMAN

To the National Council of Education:

The undersigned members of the committee to investigate the entire subject of a national university and to report to the Council do now report, as follows:

The appointment of the committee was authorized by the Council at their meeting at Washington, D. C., on July 11, 1898, in the passage of the following resolution, offered by Mr. Dougherty, of Illinois:

Resolved, That the chair appoint a committee of fifteen, the majority of whom shall be members of the Council, who shall investigate the entire subject of the establishment of a national university and report to the Council.

MEMBERSHIP

The president of the Council subsequently appointed the committee, as follows:

WILLIAM R. HARPER (*chairman*), president of the University of Chicago.

EDWIN A. ALDERMAN, president of the University of North Carolina (now president of Tulane University of Louisiana).

JAMES B. ANGELL, president of the University of Michigan.

NICHOLAS MURRAY BUTLER, professor of philosophy and education in Columbia University.

JAMES H. CANFIELD, president of Ohio State University (now librarian of Columbia University).

J. L. M. CURRY, agent of the Peabody and Slater educational funds.

NEWTON C. DOUGHERTY, superintendent of schools, Peoria, Ill.

ANDREW S. DRAPER, president of the University of Illinois.

CHARLES W. ELIOT, president of Harvard University.

EDMUND J. JAMES, professor of public administration in the University of Chicago.

WILLIAM H. MAXWELL, superintendent of schools, New York, N. Y.

BERNARD J. MOSES, professor of history and political economy in the University of California.

J. G. SCHURMAN, president of Cornell University.

F. LOUIS SOLDAN, superintendent of schools, St. Louis, Mo.

WILLIAM L. WILSON, president of Washington and Lee University.

MEETINGS

The committee have held three protracted meetings: at Washington, D. C., on November 2, 3, and 4, 1899; at Chicago, Ill., on February

26, 27, and 28, 1900; and at New York, N. Y., on May 23 and 24, 1901. The first meeting of the committee was attended by all the members except Messrs. Angell, James (absent in Europe), and Moses. The second meeting was attended by Messrs. Harper, Alderman, Butler, Dougherty, Draper, Eliot, and Soldan. The third meeting was attended by Messrs. Harper, Butler, Canfield, Dougherty, Draper, Eliot, and Maxwell.

Mr. Moses has been absent from the country on public business, and so has been prevented from sharing in any of the deliberations of the committee. Mr. Wilson's untimely death in 1900 deprived the committee of the benefit of his co-operation in the preparation of this report.

PRELIMINARY INQUIRIES

Before the committee came together for the first time, individual members had, at the request of the chairman, undertaken to prepare reports upon special phases of the subject referred to the committee, with a view to preparing the way for their more intelligent consideration and discussion. The reports so prepared included one by Mr. James, on the constitutionality of a national university (printed in the *Educational Review*, Vol. XVIII, pp. 451-66, December, 1899); one by Mr. Canfield, on past efforts to establish a national university and the reasons for their failure; two by Mr. Butler, on bills to establish a national university pending before the Congress, and on the history of any funds and bequests toward the establishment of a national university, respectively; one by Mr. Harper, on the steps taken by the Association of Agricultural Colleges and Experiment Stations to secure provision for further study in the government departments at Washington by graduates of those institutions; two by Mr. Eliot, on the existing educational agencies at Washington which might be affected by any scheme for a national university, and on the number, variety, extent, and character of the scientific or technical departments of governmental work which might properly be included in any scheme for a national university, respectively; one by Mr. Angell, on the probable attitude of the principal universities of the country toward the project to establish a national university; and one by Mr. Maxwell, on existing organizations which are interested in the establishment of a national university.

QUESTIONS STATED

With the information contained in these reports before them, the committee proceeded to the consideration of the following questions:

1. Should there be established a statutory university of the United States?

2. (a) If the first question be answered in the affirmative, how should such university be established and governed, and what should be its scope and functions?

(*b*) If the first question be answered in the negative, should the Congress be asked to place the educational facilities of the government departments at the disposal of a non-governmental institution?

3. If the question 2 (*b*) be answered in the affirmative, should a plan be devised by which, thru the co-operation of several institutions, such a non-governmental institution might be established and maintained at Washington, this to involve its incorporation and governmental aid?

ARGUMENT FOR A NATIONAL UNIVERSITY

In considering the first question, the committee took into careful consideration the argument advanced in favor of a statutory university of the United States, which is usually presented in the following form:

1. Such a university is needed to complete and to crown the educational system of the United States.

2. Such a university is needed to supplement the resources of existing institutions and to offer opportunities for more advanced investigation and research than are now offered by the universities of the country.

3. Such a university was urged by Washington, and has been urged by many eminent statesmen since the foundation of the government, as desirable and necessary.

4. Such a university is needed in order to co-ordinate the scientific work now being carried on in the several government departments at Washington, and to put that work at the disposal of advanced and adequately trained students.

CRITICISM OF THIS ARGUMENT

Waiving all questions of the constitutional power of the Congress to provide for a university of the United States, which power is held by Mr. James, in the report above referred to (see p. 458), to be fully established, the fourfold argument in favor of a national university suggests the following considerations and comments:

1. There is no educational system of the United States in the formal and legal sense in which there is an educational system of each of the several states, and therefore the contention that there should be a national university to serve the nation as each of the state universities serves its state and the state educational system, rests upon a false analogy. In a general and popular sense there is undoubtedly an American educational system, but it consists of institutions of three different types:

A. Those which the state establishes and maintains, such as the public schools and the state universities.

B. Those which the state authorizes, such as school and university corporations, private or semi-public in character, which gain their powers

and privileges by charter, and which are often exempt in whole or in part from taxation.

C. Those which the state permits, such as private-venture (unincorporated) educational undertakings of various kinds.

Each of these classes is in a true sense national, in that it reflects and represents in part the way which the American people have followed in providing general education. No inventory of the nation's educational activity is complete that does not include them all. There are in existence at the present time a group of truly national universities, some of them of the state-authorized and some of the state-supported type, and in them the national ideals and the national temper are as truly revealed and realized as are those of Germany in Berlin and in Leipzig, those of England in Oxford and in Cambridge, and those of France in Paris and in Montpellier. The argument for a statutory national university based upon the hypothesis that there is now no national university in existence is only formally true; in fact it is without foundation.

2. The argument that a statutory national university is needed to supplement the resources of existing institutions is based upon a misunderstanding of the facts. No one of the world's universities can possibly be supreme in all departments of intellectual activity; a statutory university of the United States could not be so. Conditions of time, place, special equipment, and of individual scholarship all tend to make one university stronger in some one field of investigation than in others and to render it as unwise as it is impracticable for any one university to set before itself the hope of excelling in every branch of scholarship. The universities of the United States now offer ample opportunities for the most advanced research, and these opportunities in many departments are far in excess of the number of students wishing to avail of them. On the other hand, a university which should aim to hold mature and highly trained men indefinitely in the stage of learning without either producing or teaching would be a positive injury to the national life and character. The period of preparation for the active duties of life is already unduly prolonged.

3. An examination of the several passages in the speeches and writings of Washington that relate to a national university discloses the facts that the evil against which he wished a national university to guard has long since ceased to be possible, and that his plans and hopes have been realized with a completeness of which he never dreamed by the universities which have grown up in the United States. Washington's fear was that the youth of America, being forced to obtain their higher education in Europe, would not "escape the danger of contracting principles unfavorable to republican government." Obviously this fear has been utterly dispelled, and the universities that exist are far more complete and far more advanced than anything that could have been foreseen a

century ago. There appears, therefore, to be no force in this phase of the argument for a statutory university at Washington.

4. That there are important opportunities for research of various kinds in connection with the government laboratories and collections at Washington is certain, and that full advantage should be taken of these opportunities is greatly to be desired. This desire is confessed by the Congress itself in the joint resolution of April 12, 1892, to be referred to more fully hereafter, and is frequently expressed by the directors of the scientific work of the government. But it by no means follows that the only way, or indeed the best way, to make use of these opportunities is thru the creation of a statutory, degree-conferring university. The objections to such an institution far outweigh any possible advantages which might follow from its establishment for the sole purpose of making fully effective the existing opportunities for higher instruction and research in connection with the government service, especially as it is possible to make these opportunities fully effective in what is in our judgment a simpler and a better way.

DECLARATION OF THE COMMITTEE

The committee, therefore, by unanimous vote—twelve members being present and voting—adopted the following declaration on November 3, 1899 :

1. *It has been and is one of the recognized functions of the federal government to encourage and aid, but not to control, the educational instrumentalities of the country.*

2. *No one of the bills heretofore brought before Congress to provide for the incorporation of a national university at Washington commends itself to the judgment of this committee as a practicable measure.*

3. *The government is not called upon to maintain at the capital a university in the ordinary sense of the term.*

In this declaration the committee answered in the negative the first question under consideration, namely : Should there be established a statutory university of the United States ?

ALTERNATIVE PLANS

The second question before the committee was : Should the Congress be asked to place the educational facilities of the government departments at the disposal of a non-governmental institution ?

It appears from the public record that the Congress has already done this. There are two expressions of the will and the purpose of the Congress in this matter.

The first is contained in the joint resolution, approved April 12, 1892, which is as follows :

Joint resolution to encourage the establishment and endowment of institutions of

learning at the national capital by defining the policy of the government with reference to the use of its literary and scientific collections by students :

WHEREAS, Large collections illustrative of the various arts and sciences, and facilitating literary and scientific research, have been accumulated by the action of Congress through a series of years at the national capital ; and

WHEREAS, It was the original purpose of the government thereby to promote research and the diffusion of knowledge, and is now the settled policy and present practice of those charged with the care of these collections specially to encourage students who devote their time to the investigation and study of any branch of knowledge by allowing to them all proper use thereof ; and

WHEREAS, It is represented that the enumeration of these facilities and the formal statement of this policy will encourage the establishment and endowment of institutions of learning at the seat of government, and promote the work of education by attracting students to avail themselves of the advantages aforesaid under the direction of competent instructors ; therefore,

Resolved by the Senate and House of Representatives of the United States of America, in Congress assembled, That the facilities for research and illustration in the following and any other governmental collections now existing or hereafter to be established in the city of Washington for the promotion of knowledge shall be accessible, under such rules and restrictions as the officers in charge of each collection may prescribe, subject to such authority as is now or may hereafter be permitted by law, to the scientific investigators and to students of any institution of higher education now incorporated or hereafter to be incorporated under the laws of Congress or of the District of Columbia, to wit :

- One. Of the Library of Congress.
 - Two. Of the National Museum.
 - Three. Of the Patent Office.
 - Four. Of the Bureau of Education.
 - Five. Of the Bureau of Ethnology.
 - Six. Of the Army Medical Museum.
 - Seven. Of the Department of Agriculture.
 - Eight. Of the Fish Commission.
 - Nine. Of the Botanic Gardens.
 - Ten. Of the Coast and Geodetic Survey.
 - Eleven. Of the Geological Survey.
 - Twelve. Of the Naval Observatory.
- Approved, April 12, 1892.

The second is contained in the following paragraph in the general deficiency appropriation bill passed at the second session of the Fifty-sixth Congress, and approved March 3, 1901 :

That facilities for study and research in the government departments, the Library of Congress, the National Museum, the Zoölogical Park, the Bureau of Ethnology, the Fish Commission, the Botanic Gardens, and similar institutions hereafter established, shall be afforded to scientific investigators and to duly qualified individuals, students, and graduates of institutions of learning in the several states and territories, as well as in the District of Columbia, under such rules and restrictions as the heads of the departments and bureaus mentioned may prescribe.

The joint resolution of April 12, 1892, placed the governmental facilities for research at the disposal of duly qualified students of institutions of learning at Washington, D. C. The law of March 3, 1901,

extends the same privilege to duly qualified students or graduates of institutions of learning wherever they may be situated thruout the United States.

It appears, therefore, that the Congress has already taken the necessary steps to make possible all that is desired in this connection, and it only remains to devise a plan by which the advanced students who wish to avail of the opportunities offered may be given such systematic information, direction, and oversight as they may need in order to carry on their studies to the best advantage, and in order that such official records of their work at Washington may be kept as will justify the several universities of the country in recognizing the period spent in study and investigation at Washington in passing upon their qualifications as candidates for the higher academic degrees.

A NON-GOVERNMENTAL INSTITUTION AT WASHINGTON

The remaining question before the committee for consideration was, then, this: Should a plan be devised by which, thru the co-operation of several institutions, such a non-governmental institution should be established and maintained at Washington, this to involve its incorporation and governmental aid?

The subject of the best form of organization for such an institution and of its precise relations to the government has been given prolonged consideration. Advice and suggestion have been sought from the heads of the several scientific bureaus at Washington, from the representatives of the Association of Agricultural Colleges and Experiment Stations, from the presidents of the state universities and land-grant colleges, and from many others believed or supposed to be interested in the question. It seemed at first as if a solution might be found thru the Smithsonian Institution and that it might most wisely undertake the advisory and supervisory functions for which provision was to be made. The authorities of the Smithsonian Institution, however, did not view the suggestion with favor, and, in addition, they were doubtful of their legal capacity to perform such functions. Another objection was found in the fact that the Smithsonian Institution restricts itself to the field of the natural sciences, whereas students of history, political economy, and philology are also to be provided for.

An alternative suggestion was that the Bureau of Education should be asked to assume executive control of the proposed student body. On reflection, however, it appeared that this would require far-reaching amendments to the law governing the bureau, that these might be difficult or impossible to obtain, and that the matter might become complicated with wholly extraneous considerations relating to the status of the Bureau of Education and the extension of its authority in other directions.

It has, therefore, seemed best to the committee not to propose either of the plans above mentioned.

The committee have been advised, however, of a plan for a non-governmental institution at Washington, which may be able to supply all that is desired. This plan is the outcome of action taken by the Washington Academy of Sciences and by the George Washington Memorial Association.

WASHINGTON ACADEMY OF SCIENCES

The Washington Academy of Sciences includes in its membership all, or nearly all, of the directors and officers of the scientific bureaus of the government. It was organized in 1898 and grew out of the affiliation which had previously existed between the local scientific societies. It is an incorporated body having for its main object to bring within a single organization the representatives of the varied scientific work being carried on at the capital. The academy has power to acquire and to hold real estate, to publish, to conduct, or to assist investigation in any department of science, to maintain a library, and in general to transact any business pertinent to an academy of sciences. The list of members, resident and non-resident, of the Washington Academy of Sciences shows that it is national in its scope and influence, and that representatives of philosophy, history, education, and political economy are included.

GEORGE WASHINGTON MEMORIAL ASSOCIATION

The George Washington Memorial Association is an organization of women, incorporated in the District of Columbia in 1898, "to advance and secure the establishment in the city of Washington, D. C., of a university, for the purposes, and with the objects, substantially as contemplated and set forth in, and by, the last will of George Washington, the first president of the United States of America, and to increase the opportunities for the higher education of the youth of the said United States, and to this end to collect, take, and hold moneys, gifts, and endowments, to take and to hold by purchase, donations, or devise, real estate, to erect and furnish buildings to be used by said university, when legally established," and so forth.

In the year 1901 the certificate of incorporation of the George Washington Memorial Association was amended in due legal form, and all mention of a university was omitted from the statement of its purposes. The object of the association is now declared to be "to aid in securing in the city of Washington, D. C., the increase of opportunities for higher education, as recommended by George Washington, the first president of the United States of America, in his various messages to Congress, notably in the first, in favor of 'the promotion of science and literature,' and substantially as contemplated and set forth in the last will of George Washington, and by and through such other plans and methods as may

be necessary and suitable for the objects and purposes herein set forth, and to this end to collect, take, and hold moneys, gifts, and endowments; to take by purchase, donation, or devise, real estate, and hold the same; to erect and furnish buildings to be used for the purposes herein set forth; and, when necessary for the said purposes, to sell, convey, mortgage, and exchange any real and personal estate which the association may hold, and to do any and all things which may lawfully be done in carrying out the objects and purposes of this corporation."

ACTION OF THESE ORGANIZATIONS

It appears that action has been taken by these organizations — by the board of managers of the former on February 26, 1901, and by the board of trustees of the latter on March 13, 1901—which brings the support of each to a plan for an institution of the type which has been discussed above. Both organizations have agreed to co-operate to found an institution in the city of Washington, as a memorial to George Washington, which shall be maintained to promote the advanced study of the sciences and the liberal arts, and which shall assist in carrying out the purposes and the intent of the joint resolution of April 12, 1892, and of the law of March 3, 1901.

WASHINGTON MEMORIAL INSTITUTION

On May 17, 1901, articles of incorporation were filed at Washington, D. C., signed by Daniel C. Gilman, president of the Johns Hopkins University; Charlotte Everett Hopkins, president of the George Washington Memorial Association; C. Hart Merriam, chief of the United States Biological Survey; George M. Sternberg, surgeon-general, United States army; Charles D. Wolcott, director of the United States Geological Survey; and Carroll D. Wright, United States commissioner of labor, as follows:

ARTICLES OF INCORPORATION

We, the undersigned, persons of full age, and citizens of the United States, and a majority of whom are citizens of the District of Columbia, being desirous to establish and maintain, in the city of Washington, an institution in memory of George Washington for promoting science and literature, do hereby associate ourselves as a body corporate, for said purpose, under the general incorporation acts of the Congress of the United States enacted for the District of Columbia; and we do hereby certify in pursuance of said acts as follows:

1. The name or title by which such institution shall be known in law is the Washington Memorial Institution.
2. The term for which said institution is organized is nine hundred and ninety-nine years.
3. The particular business and objects of the institution are: to create a memorial to George Washington; to promote science and literature; to provide opportunities and facilities for higher learning; and to facilitate the utilization of the scientific and other resources of the government for purposes of research and higher education.
4. The number of its trustees for the first year of its existence shall be fifteen.

Steps are to be taken at once by these incorporators to organize the

institution, as described, and to select a body of trustees which shall be efficient and, so far as may be, representative of a variety of scientific and educational interests.

CHARACTERISTICS OF THE INSTITUTION PROPOSED

Concerning the proposed institution, we assume :

1. That it will be independent of government support or control, as it will also be independent of the support or control of existing educational institutions. It might well appeal with peculiar force to the generosity of those men and women who are willing to increase, and who are desirous of increasing, the endowment of higher education in the United States.

2. That its objects will be :

(a) To facilitate the use of the scientific and other resources of the government for research.

(b) To co-operate with universities, colleges, and individuals in securing to properly qualified persons opportunities for advanced study and research now obtainable only to a limited extent in Washington and not at all elsewhere.

3. That its oversight and control will be in the hands of trustees and officers representing the educational experience and ideals of the existing institutions for higher education.

4. That the arrangements between the student body and the several governmental bureaus will be made, subject to the by-laws of the trustees, in such a way as to carry out to the fullest possible extent the declared policy of the Congress. It is expected that the government officials will advise rather than instruct the students assigned to them.

5. That the sole test of admission to the privileges which the institution offers will be merit and proficiency, to be ascertained in such way as the trustees shall provide.

6. That students coming from universities and colleges for a period of study or investigation at Washington will, upon request, be given appropriate credentials, on completing their work, for presentation to the institution from which they seek a degree.

7. That students working in government laboratories or collections will be subject to the rules and regulations there prevailing.

8. That, if successfully carried out, this plan will provide a body of trained students, ready for expert work, many of whom might enter the government service, while others would become instructors in institutions of learning or be engaged as experts in a private capacity.

PROVISION FOR STUDENTS

The departments or subjects in which graduate students could be received, and the provision that could be made for them at present, are unofficially estimated to be as follows :

	POSSIBLE INSTRUCTORS	MAXIMUM NUMBER OF STUDENTS
1. Animal industry.....	10	25
2. Anthropology and ethnology.....	4	13
3. Astronomy.....	3	8
4. Botany.....	11	25
5. Cartography.....	2	5
6. Chemistry.....	6	10
7. Forestry.....	10	20
8. Geology.....	10	17
9. History (Library of Congress).....	5	10
10. History and diplomacy (State Department).....	1	5
11. Hydrography.....	5	10
12. Library administration and methods (Library of Congress).....	5	15
13. Magnetism.....	1	2
14. Meteorology.....	5	15
15. Mineral resources.....	2	5
16. Palæontology.....	5	7
17. Physics.....	2	3
18. Standards (Bureau of).....	Now being	organized
19. Statistics.....	2	5
20. Tides.....	1	2
21. Topography.....	10	20
22. Zoölogy.....	34	50
	134	272

ACTION OF COMMITTEE

The committee have adopted the following resolution :

Resolved, That we approve the plan for a non-governmental institution, known as the Washington Memorial Institution, to be established and maintained at Washington, D. C., for the purposes of promoting the study of science and the liberal arts at the national capital, and of exercising systematic oversight of the advanced study and investigation to be carried on by duly qualified students in the governmental laboratories and collections, in accordance with the terms of the joint resolution of Congress approved April 12, 1892, and those of the act of March 3, 1901.

We recommend that the National Council of Education adopt the following resolution :

Resolved, That the report of the committee authorized by resolution of July 11, 1898, to investigate the entire subject of a national university be received, and the committee discharged.

WILLIAM R. HARPER,

Chairman.

EDWIN A. ALDERMAN.

NICHOLAS MURRAY BUTLER.

JAMES H. CANFIELD.

J. L. M. CURRY.

NEWTON C. DOUGHERTY.

ANDREW S. DRAPER.

CHARLES W. ELIOT.

WILLIAM H. MAXWELL.

J. G. SCHURMAN.

F. LOUIS SOLDAN.

NOTE.—Mr. Edmund J. James was unable to attend the meetings of the committee, and declines to sign the report.

DISCUSSION¹

PRESIDENT JAMES H. BAKER of the University of Colorado said in substance: There appears to be a remarkable relation between the stages of progress and findings of this committee and the activities of the promoters of the so-called Washington Memorial Institution. I fear that the committee, or members thereof, in their zeal to carry out the view embodied in this report, have gone far in attempting to predetermine results before making the report to the body that appointed them. Under the head "Declaration of the Committee," it is seen that at their first meeting they, by resolution, gave their judgment upon the real question referred to them. This resolution was given to the country, virtually in the name of the National Educational Association, at a time when a bill for a national university was likely to receive favorable consideration in Congress. Instead of making their adverse report at the next meeting of the Council, held some months later in Charleston, they, thru their chairman and secretary, made an informal report at that time to the effect that they had reached no final conclusions and were still investigating with open minds. The question as to why, then, they had at their first meeting decided the question at issue and immediately made it public was not answered. Just before this, 1901, meeting of the National Educational Association, the press of the country not only made known that the report is adverse to the scheme of a national university, but also at the same time announced that the Washington Memorial Institution was founded. Before the report is made we find the names of the chairman and secretary of this committee on the board of trustees of said institution. It seems as tho it were intended to leave the Council nothing to do but to accept the report of the committee, together with the Washington Memorial Institution. I say again it appears that the committee in its zeal has gone far to realize the plan recommended before making the report.

Under the head "Preliminary Inquiries" are many interesting subjects of investigation. We could wish that the results of investigation had been given us as a part of the report.

The "Argument for a National University," I think, is not fully and adequately stated. Professor Giddings, in his work on sociology, enumerates twelve modes of equality necessary to a successful democracy, and he says that only by a thoroly organized and successful public-school system can a sense of the equalities be instilled. He might have included state universities and a national university. There are problems of democracy, serious ones, and our colleges have not yet done their full work in helping solve them. While our state universities have not yet done all that should be expected of them, I believe they are doing more than other institutions in making citizens who have an interest in the welfare of the state and a ready sympathy with the problems of all classes of society. A national university, in touch with the people, supported by public funds, would give the professors and students therein a truer sense of true Americanism than could be developed in any other relation. It would serve to make the brightest and most progressive minds of the world leaders in bringing the people to a consciousness of their ideals. It would pay to maintain a national university if for no other purpose than to give our representatives in Congress other interests than commercialism and politics. In founding and upbuilding a national university they would devote themselves to an ideal interest ideally. Its idealizing influence would be at the center of the governmental life of democracy. Its effect upon the nation in the course of a century, I believe, would be marvelous. Scholars, assembled in a national institution of learning from all parts of the country and from all countries of the world, would carry to the corners of the earth American ideas, ideas purified by their very means. Our statue of Liberty Enlightening the World would then have a true significance.

¹ It is a matter of regret that the report of this discussion does not include all of the speakers.—EDITOR.

The above are two additional arguments for a national university. Moreover, I am confident the great mass of public educators and of all thoughtful Americans believe in a national university. For more than a hundred years the project has been before the people and has been strongly advocated by eminent men. The National Educational Association in the seventies unanimously and repeatedly affirmed its belief in a national university. There has existed for years a National Committee of Four Hundred to promote its establishment. This committee has an executive council of fifteen members, all eminent men in the history and affairs of the nation, who, with remarkable zeal, have devoted time and study and active effort to the problem. Ex-Governor John W. Hoyt, the secretary of the executive council, with no other motive than a desire to see an institution that would help the nation, without hope or desire of reward, has spent years of his time and energy in promoting the cause. The pity is that the National Educational Association, in addition to expressing its belief in a national university, did not appoint an active committee to aid the cause, and provide the committee with necessary funds.

I wrote recently to all the state universities, asking for latest views regarding a national university. Up to date I have received eighteen replies, and all but one are favorable to the idea of a genuine university conducted and supported by the government. One of them says: "I do not urge the establishment of such an institution in the interest of the further development of our resources, of more commercialism, or for any other material reason, but purely in the interests of common democracy." Another says: "If we agree that a higher public-school system is necessary, with its early response to public sentiment, we must for that very reason concede that the old endowed institutions, which do not rapidly respond to public sentiment, are also a necessity to offset too rapid a change in public thought. In other words, both are necessary, but the enormous wealth and endowment of the conservative class should be met by advancement along the lines of improvement in the responsive class. This can be met only thru the creation of a national university."

I also wrote to the members of the executive council. These men are widely scattered, and I have heard, directly and indirectly, from only six. General Nelson A. Miles writes a very strong argument for the university idea. He also says: "There has been no valid room for other than affirmative views, and there can be none." Ambassador Andrew D. White reaffirms his views so often strongly expressed. Ex-Minister John A. Kasson offers a convincing affirmative argument. Professor S. P. Langley, heard from only indirectly, raises a practical point, to which I shall refer later. Professor Simon Newcomb says: "So far as what I should desire to see, my views remain unchanged." He, however, expresses fear of the strength of the opposition. Ex-Senator George F. Edmunds writes a full expression of his views. Among other things he says: "Such an institution, being purely non-sectarian, and differing in this respect from other powerful institutions in Washington and elsewhere, can have a vast influence in preserving the fundamental principles of liberty of thought and action under equal law. I am confident that when the subject is considered broadly, success will easily be obtained, notwithstanding the opposition which, in the main, I cannot but think, arises from selfish interests." More than one of these men express in substance this thought, quoted from one of the letters: "These considerations make all opposition based on local and denominational selfishness so unworthy that they should not for a moment weigh with a patriotic people or their honored representatives in the American Congress." Hon. Andrew D. White, in an article first published in 1889, but revised and republished in 1909, offers strong arguments. He believes a national university would have an influence in uniting all sections of the country; that it would become the equal of Berlin; that it would in every way supplement and aid existing universities; that the influence of such an institution upon the atmosphere of Washington would be most salutary. President Jordan of Stanford has an article in the *Forum*, 1897. He refers to the influence of the University of Berlin upon Germany, and urges the need of a national university for the United States.

Further on he says: "It is not the needs of the District of Columbia which are to be met by a university of the United States. The local needs are well supplied already. It is the need of the nation, and not of the nation alone, but of the world. A great university in America would be a school for the study of civic freedom. A great university at the capital of the republic would attract the free-minded of all the earth. It would draw men of all lands to the study of democracy. It would tend to make the workings of democracy worthy of respectful study." He further says: "If a national university is a national need, it is the duty of the people to meet and satisfy it. No other power can do it. As well ask wealthy manufacturers or wealthy churches to endow and support our supreme court of law as to endow and support our supreme university. They cannot do it; they will not do it; and, as free men, we would not have them do it if they would. A university bears the stamp of its origin. Whatever its origin, the university ennoble it. But a national university must spring from the people. It must be paid for by them; and it must have its final justification in the upbuilding of the nation. Whatever institutions the people need, the people must create and control. That this can be done wisely is no matter of theory. With all their mistakes and crudities, the state universities of this country constitute the most hopeful feature in our whole educational system. Doubtless the weakness and folly of the people have affected them injuriously from time to time. This is not the point. We must think of the effect they have had in curing the people of weakness and folly." He closes thus: "There is no instrument of political, social, or administrative reform to be compared with the influence of a national university."

As to the "Criticism of This Argument," it appears to me not strong. (1) We do not emphasize the argument from analogy. The case rests on its independent merits. (2) Our proposition is that a national university shall be more adequate than any other can possibly be made. (3) Anyone acquainted with Washington's writings upon the subject knows that the reason emphasized in paragraph 3 is not the only one he urged. Moreover, since his day the reasons for a national university have expanded and are more clearly seen. (4) We also desire to take full advantage of the opportunities at Washington, but we shall try to show that the scheme advocated by the committee is not to be considered as a substitute for a national university.

In passing, I wish to note that without question influences representing some religious denominations are actively hostile to a national university. While I stand firmly for all that the churches truly represent, I feel keenly that this mistaken zeal is not to be tolerated.

Noting the history of the George Washington Memorial Association, it appears that it has been *captured* by those opposed to the university idea, together with its funds raised "to advance and secure the establishment in Washington, D. C., of a university," etc.

Under "Characteristics of the Institution Proposed" we see that the Memorial Institution is to be "independent of government support or control." In other words, another private institution has been founded in Washington with which we, of course, have nothing to do. Should the government allow its facilities to be used under the advice of a private body not responsible to the government?

Now we come to the scheme of the Washington Memorial Institution. By the report of the committee there are 272 units of possibility for special investigation in the government institutions and departments in Washington, provided each student takes but one subject. If each takes two or three subjects, the number of students is reduced to about one hundred. A member of the committee has said there are not opportunities for fifty students. The scheme of the Washington Memorial Institution is not adequate. I believe it is not intended seriously, except by the enemies of a national university, to prevent its establishment. Professor Langley, of the Smithsonian, points out that the laboratories in the government institutions and departments are not adequate for a large number of student investigators; neither could time be given to needful instruction. We can draw the inference that there must be a genuine university, with professors and full equipment, before students can make use of the splendid opportunities in Washington owned by the

government. This Memorial Institution plan is hardly the shadow of a shadow of a university. The problem remains where it was before, to be solved by the friends, in this association and elsewhere, of a national university. I mean by a national university a great post-graduate institution—a greater than Berlin—wonderfully equipped, with professors representing the culture and progress of the world, with thousands of graduate students from all parts of the country and from all countries of the world, standing as an ideal interest of Congress and of the American people, in touch with the people, and helping the people come to a consciousness of the true ideals of democracy, and spreading those ideals over the civilized world. And they offer us this pitiful substitute!

With the opposition naturally stand a few great universities and a few religious denominations. President Gilman, in his article on a national university, is very frank and asks what Columbia and Harvard and Yale and Johns Hopkins will say to the idea of a university that might attract some of their best professors and students. We are told that the scheme is visionary. The American republic needs a true and far-reaching vision of greater things than average politics gives us. We are told that there are difficulties in the way. Shades of William Lloyd Garrison and Wendell Phillips! When shall the Anglo-Saxon American people be told that they are not to undertake a right thing because there are difficulties in the way?

I hope this Council of Education will affirm its belief in a national university. I hope further that in the business meeting of the active members of the general association a resolution will be passed reaffirming belief in a national university, and that a committee will be appointed, with funds for necessary publications, to aid the Committee of Four Hundred in securing its foundation.

This is not a question of the interest of a few great universities or of a few great religious denominations; but it is a question of fostering our public-school system, our public universities, all colleges and universities of the better class, democracy, progress, American scholarship, national ideals, and America's influence upon the world.

EX-GOVERNOR JOHN WESLEY HOYT, chairman of the National University Committee.—*Mr. President, Members of the Council:* Before entering upon the subject under discussion I should, in justice to the cause itself and to the great committee of its promoters, whom I have the honor to represent, mention the facts personal to myself that being barely convalescent after a long illness and in no condition even to make the journey, it was the earnest requests of friends, and these alone, to which I yielded so far as finally to accept the invitation; and, secondly, that within three days of the date of necessary departure I had an alarming prostration by heat. That I am, therefore, in a totally unfit condition to appear before you will very certainly make itself manifest from beginning to end.

Nevertheless, I was sorry to hear from the presiding officer that I can have but a very short time, for there is much that I should like to say.

It had been my purpose, first of all, to offer a brief summary of what, in the judgment of the National Educational Association, some years ago, a national university should be; second, to remind the members of this great association what it actually did, a quarter of a century ago, toward securing the establishment of such a university; third, to present a résumé of the efforts of the National University Committee, and of the action of Congress, more especially of the Senate, in this same behalf, during the last decade; and finally to offer what, to my mind, are reasons more than sufficient why the remarkable report of your Committee of Fifteen should be emphatically disapproved by this Council and by the National Educational Association at large.

In view of the unexpected limitation, I shall find it difficult to rightly apportion the time.

Let me say, at the outset, that my own deep interest in the subject of a national university came of an inspection of the educational institutions of the Old and the New

World, made in my capacity as United States commissioner to the Paris Exposition of 1867, and by special authority of Mr. Seward, then secretary of state. It was my surprise and mortification, upon the conclusion of two years of travel and study (in the course of which I visited every university in Europe and America), that aroused me to efforts in behalf of university education, in which our deficiencies were most marked.

As many of you will recall, the National Educational Association, at Trenton, N. J., in 1869, adopted unanimously the following resolution :

Resolved, That, in the opinion of this association, a great American university is a leading want of American education, and that, in order to contribute to the early establishment of such an institution, the President of this association, acting in concert with the president of the National Superintendents' Association, is hereby requested to appoint a committee, consisting of one member from each of the states, and of which Dr. J. W. Hoyt, of Wisconsin, shall be chairman, to take the whole matter under consideration, and to make such report thereon, at the next annual convention of said associations, as shall seem to be demanded by the interests of the country.

I can now barely mention the facts that the committee's preliminary report, submitted at Cleveland, in 1870, was in itself unanimous, and was unanimously adopted by the association.

The report submitted at St. Louis, in 1871, likewise unanimously adopted by the association, among other things contained an outline of what a national university should be.

At the same time the national committee was made to consist of fewer members and was constituted "a permanent committee," with powers to frame a bill, to send the same to members and to leading citizens thruout the country, and, when ready, to offer it to Congress and press its passage.

You are aware that such a bill was finally, in 1872, introduced, and that it was unanimously reported by the house committee on education, which included many eminent members of that body, among them Mr. George F. Hoar, of Massachusetts. Of the long lapse of time, during which, owing to the protracted absence of members of the committee from the country, and the difficulty of enlisting active successors, little was done, I will only say that this has been to me a source of unending regret.

In so far as the National Educational Association is concerned, consolation is found in these two facts : First, that upon conclusion of a reply by the chairman of its committee, in this city of Detroit, in 1874, to an attack upon the national-university movement by the president of Harvard the year before (during the chairman's absence from the country), the following resolution was unanimously adopted by the association, and with special emphasis :

Resolved, That this association does hereby reaffirm its former declarations in favor of the establishment of a national university devoted, not to collegiate, but to university work, providing higher instruction in all departments of learning, and so organized as to secure the necessary independence and permanency in its management.

Secondly, that when the old-time chairman of the aforesaid committee had determined to resume his efforts for the university and repaired to Washington for that purpose, every member of the National Educational Association whom he was able to consult as to laying the matter again before that body at its next annual meeting, said in substance : "No, the association is sure, absolutely sure, already, and will be prepared, when the time shall have come for its co-operation—when, as a great and influential body, its help is needed. It is better that a new committee be formed, including, besides some of the leading members of the association, the strongest public men of the country in other fields of activity."

It was for this reason that the "National Committee to Promote the Establishment of the University of the United States" was formed in 1891, and embraces, besides the presidents of over two hundred leading colleges and universities and the state superintendents of public instruction, statesmen, jurists, scholars, scientists, and heads of national organizations enough to swell the number beyond four hundred.

You are doubtless familiar with the earnest enlistment of the able and honored Senator George F. Edmunds of Vermont in a revival of the national-university question, in 1890, by securing the appointment of a special Senate "committee to establish the University of the United States," with the introduction of a bill, and with its reference to said committee.

You may also know that, after his retirement from the Senate because of serious ill-health, the said committee was made a "standing committee;" that a unanimous report was submitted by Senator Edmunds' successor in the chairmanship of said committee, Chairman Proctor, of Vermont, in 1893, tho too late to secure action; and another report, also unanimous, by his successor, Chairman Hunton, of Virginia, in 1894, who succeeded in getting the bill ably discussed on the affirmative side, tho not in getting it to a vote, because of interference by the appropriation bills and the arrival of the time when, under the rules, a single vote was sufficient to prevent further action during that Congress. You may further know of the affirmative report afterward submitted by Chairman Kyle, of South Dakota, in 1896, with the inclusion of over three hundred letters in support of the measure from some of the ablest and most distinguished men of the United States; and that the bill so reported was prepared during three protracted sessions of the executive council of the National University Committee, the chief justice of the United States presiding, and every member but one being present.

That this bill, of which President David Starr Jordan of Leland Stanford University wrote, "Put it through without the change of a punctuation point," failed was due to the absence of the chairman of the Senate committee during almost the entire last session of the Fifty-fourth Congress (during the session of the South Dakota legislature), and to the natural reluctance of Senators John Sherman, Frye, and other members of the committee to take his place while daily expecting his return, especially since, meanwhile, a minority report (tho brief, weak, and ill-supported) had been offered.

* * * * *

The record of national-university efforts in the Senate puts it beyond question that, while the Senate itself has dealt most liberally and handsomely with the university question, there have been delays unpardonable on the part of two chairmen of the Senate committee, especially the last one — delays, too, in the latter case, which many friends of our measure insist have a mysterious connection with those of the Committee of Fifteen, but which I shall myself not here attempt to explain otherwise than to note that the actual work of said Committee of Fifteen may have devolved upon a very small number of its members.

As for the report of the Committee on a National University now under discussion, I regret to speak of it, for there are attached to it the signatures of distinguished men whom I have long highly respected, some of them members of the national-university committee. But, on the other hand, it is my necessity to speak of the results of their years of labor in terms of the severest condemnation, both on account of the unreasonable delays involved and because of the astonishing recommendation with which the report concludes — a recommendation which, carefully and dispassionately viewed, seems to be nothing less than an attempt to foist upon the National Educational Association and the country a weak and unworthy substitute for the noble national university to which the association stood so entirely committed in other years, and by which I firmly believe it will ever stand.

Did time permit, I would point out, right here, how this "memorial" concern is practically made up of faults and deficiencies — that it is substantially confined to some sort of popular utilization of the scientific resources of the government at Washington, and that even in attempting this they have offered a scheme that must prove a failure.

I would show likewise how, as a private institution, it must necessarily fail of all those great educational, national, and even international ends which Washington, Jefferson, and the most illustrious of other of our presidents, as well as a multitude of

statesmen, scholars, scientists, and practical educators have had in view for a hundred years.

And, finally, I would remind you of the affront this "memorial" scheme offers to the Father of his Country. It was not a narrow, one-sided institute, originated by one or more of the worst enemies of the great idea he so cherished, and for whose final realization he made the best contribution he could in his last will and testament; it was not any such "institution" as we have outlined before us, worked up and now in control of national-university deserters, faint-hearted friends, and declared opponents of any university likely to become greater than their own, no matter what its claims on national and universal grounds; it was nothing of this sort that the immortal Washington was so profoundly interested in — as they who devised and organized it very well know. And in his great name, we who have believed with him and have zealously worked for the needed realization of his noble aims, utterly repudiate, whatever claims its founders may make to consideration on national and patriotic grounds, this "Memorial Institution."

Using the "two minutes more" the chair has kindly granted me, let me declare my conviction that the "Memorial Institution" will prove a *faux pas*, and that the national-university movement will go forward. To friends of the national university who from the first have done little to help, trusting that other of its friends would carry it thru, with the help of Providence, and who have mistakenly assumed that the years of delay in the Senate were a symptom of a decline in interest — to such it may seem strange; but, as for myself, these methods of the enemy, whom it seems we were destined to meet, have but increased my determination. With many years and many thousands of dollars of my own so freely given to the university cause already, I am newly nerved and consecrated.

I need hardly say to those who have known my past life — and yet, because of base intimations in one or two quarters, it may be my duty to say — that a victory fully won could by no possibility have anything of personal advantage for me other than a consciousness of duty done — an elevating sense of labors performed and sacrifices made not in vain. For, if already established by act of Congress and to be organized tomorrow, the national university would include no official station that I could be induced to accept, if offered me, either then or at any time thereafter. As a determined promoter of the movement begun by Washington, I have been no less purely patriotic than he. For its realization I shall continue to labor, and am ready to lay down my life. With the distinguished President Gilman, of 1895, "I firmly believe that a national university will be established in Washington;" and with the eminent William R. Harper, president of the University of Chicago, "I have always believed in such an institution, and will continue to believe in it. There is everything to be gained and nothing to be lost."

THE IDEAL SCHOOL AS BASED ON CHILD STUDY

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I shall try in this paper to break away from all current practices, traditions, methods, and philosophies, for a brief moment, and ask what education would be if based solely upon a fresh and comprehensive view of the nature and needs of childhood. Hitherto the data for such a construction of the ideal school have been insufficient, and soon they will be too manifold for any one mind to make the attempt; so the moment is opportune. What follows is based almost solely, point by point, upon the study of the stages of child development, and might, perhaps, without presumption be called a first attempt to formulate a

practical program of this great movement. In my limited space I can do little more than barely state the conclusions that affect the practical work of teachers.

The school I shall describe exists nowhere, but its methods, unless I err, are valid everywhere. Altho many of its features exist already, and could be pieced together in a mosaic from many lands and ages, it is essentially the school invisible, not made with hands. But, as there is nothing so practical as the truly ideal, altho my school today exists nowhere, it might be organized anywhere tomorrow; and I hope that the most and the least conservative will agree that it is the true goal of all endeavor, and will not differ except as to whether it may be realized at once or only at the end of a long period of labor. I confess that something like this has from the first animated all my own feeble educational endeavors, and that without it I should be without hope and without goal in the world of pedagogy.

Beginning with the deep philosophy often imbedded in words, "school," or "schule," means leisure, exemption from work, the perpetuation of the primæval paradise created before the struggle for existence began. It stands for the prolongation of human infancy, and the no whit less important prolongation of adolescence. It is sacred to health, growth, and heredity, a pound of which is worth a ton of instruction. The guardians of the young should strive first of all to keep out of nature's way, and to prevent harm, and should merit the proud title of defenders of the happiness and rights of children. They should feel profoundly that childhood, as it comes fresh from the hand of God, is not corrupt, but illustrates the survival of the most consummate thing in the world; they should be convinced that there is nothing else so worthy of love, reverence, and service as the body and soul of the growing child.

Practically, this means that every invasion of this leisure, the provision of a right measure of which is our first duty to youth, has a certain presumption against it, and must justify itself by conclusive reasons. Before we let the pedagog loose upon childhood, not only must each topic in his curriculum give an account of itself, but his inroads must be justified in the case of each child. We must overcome the fetichism of the alphabet, of the multiplication table, of grammars, of scales, and of bibliolatry, and must reflect that but a few generations ago the ancestors of all of us were illiterate; that the invention of Cadmus seemed the sowing of veritable dragon's teeth in the brain; that Charlemagne and many other great men of the world could not read or write; that scholars have argued that Cornelia, Ophelia, Beatrice, and even the blessed mother of our Lord knew nothing of letters. The knights, the élite leaders of the Middle Ages, deemed writing a mere clerk's trick beneath the attention of all those who scorned to muddle their wits with others' ideas, feeling that their own were good enough for them.

Nay more: there are many who ought not to be educated, and who would be better in mind, body, and morals if they knew no school. What shall it profit a child to gain the world of knowledge and lose his own health? Cramming and over-schooling have impaired many a feeble mind, for which, as the proverb says, nothing is so dangerous as ideas too large for it. We are coming to understand the vanity of mere scholarship and erudition, and to know that even ignorance may be a wholesome poultice for weakly souls; while scribes, sophists, scholastics, and pedants suggest how much of the learning of the past is now seen to be vanity, and how incompetent pedagogs have been as guardians of the sacred things of culture. Thus, while I would abate no whit from the praise of learning and education for all who are fit for them, I would bring discrimination down to the very basis of our educational pyramid.

I. The kindergarten age is from two or three to six or seven. Here, before the ideal school can be inaugurated, we need some work of rescue from the symbolists. Now the body needs most attention, and the soul least. The child needs more mother, and less teacher; more of the educated nurse, and less of the metaphysician. We must largely eliminate, and partly reconstruct, the mother-plays, while transforming and vastly enlarging the repertory of the gifts and occupations. We must develop the ideal nursery, playgrounds, and rooms, where light, air, and water are at their best. The influences of the new hygiene have been felt least here, where they are needed most. The neglect of these basal principles suggests that we have still among us those whose practice implies a belief that any old place is good enough to hatch out beautiful souls, provided only Froebelian orthodoxy of doctrine and method is steadfastly maintained. In place of a magic mongering with them, the cubes, spheres, cylinder, and also the top, soap-bubble, doll, dances, marches, circus, and scores of other free plays and games; and in place of two or three fish, insects, animals, plants, several score must be provided, and a museum and *catalogue raisonné* of toys must be at hand. Eating bread, milk, fruit, with some simple table manners, and using paper napkins, sometimes do wonders for these human larvæ. Feeding brightens the mind and saves the disposition; a full stomach opens the mouth, and good courses of lessons could be derived from the viands themselves.

The kindergarten should fill more of the day, and should strive to kill time. In the Berlin Institute children sleep at noon in a darkened room, with music, crackers, or even bottles, and thus resist man's enemy, fatigue, and restore paradise for themselves. Part of the cult here should be idleness and the intermediate state of reverie. We should have a good excuse to break into these, and at this age children should be carefully shielded from all suspicion of any symbolic sense. Thus in play, and in play only, life is made to seem real. Imitation should have a far

larger scope. Children should hear far more English and better, and in the later years the ear should be trained for French or German. Color should never be taught as such. The children of the rich, generally prematurely individualized or over-individualized, especially when they are only children, must be disciplined and subordinated; while the children of the poor, usually under-individualized, should be indulged. We should lose no syllable of the precious positive philosophy of Froebel, the deepest of all modern educational thinkers; but we must profoundly reconstruct every practical expression that he attempted of his ideas, and must strive to induce at least a few college-trained men and women to turn their attention to the kindergarten, thus making the training schools feel, what they have hitherto known so little of, the real spirit and influence of modern science. Teachers should study every child, not necessarily by any of the current technical methods. They should learn far more than they can teach, and in place of the shallow manikin child of books they should see, know, and love only the real thing. After this metempsychosis, the kindergarten should be, and should become, an integral part of every school system.

II. The age of about seven or eight is a transition period of the greatest interest for science. Then most children have less chewing surface by three or four teeth; there is a year or more of increased danger to the heart; the breath is shorter and fatigue easier; lassitude, nervousness, visual disorders, and cough are somewhat more imminent; and the blood is more often impoverished. The brain has practically finished for life its growth in weight and size; and all work and strain must be reduced. Some important corner in its time of development, not yet fully understood, is turned.

III. At eight or nine there begins a new period, which, for nearly four years, to the dawn of puberty, constitutes a unique stage of life, marked off by many important differences from the period which precedes and that which follows it. During these years there is a decreased rate of growth, so that the body relatively rests; but there is a striking increase of vitality, activity, and power to resist disease. Fatigue, too, is now best resisted, and it is amazing to see how much can be endured. The average child now plays more games, and has more daily activity, in proportion to size and weight, than at any other stage. It would seem, as I have proposed elsewhere with ground for the theory, as tho these four years represented, on the recapitulation theory, a long period in some remote age, well above the simian, but mainly before the historic, period, when our early forebears were well adjusted to their environment. Before a higher and much more modern story was added to human nature, the young in warm climates, where most human traits were evolved, became independent of their parents, and broke away to subsist for themselves at an early age. In this age, which we will call the juvenile, the individual

boy today is a precious key for the reconstruction of a stage in the history of the race otherwise very obscure.

However this may be, child nature suggests very plainly that this period should be mainly devoted to drill, habituation, and mechanism. The age of reason is only dawning, and is not yet much in order; but discipline should be the watchword here. Writing, and even reading, for instance, should be neglected in our system before eight, and previous school work should focus on stories, the study of nature, and education by play and other activities. Now writing and reading should be first taught with stress. Their nascent period is now beginning. If we teach them before, we are apt to make the average child a bad writer for life by precocious overemphasis on the finer muscles. Modern studies show that the zigzag of the eye back and forth along the printed line is as dangerous as is the too early wigwag of the pen. At best the strain laid upon these tiny muscles is dangerous. Too early drill in read-writing is also enormously wasteful, because intensive effort gives facility now in an amazingly short time. Now first the smaller muscles in the average child, so important for mind- and will-training, can bear hard work and much strain. Accuracy, which, when out of its season, is fraught with so many dangers for mind and body, is now in order.

Verbal memory is now at its very best, and should be trained far more than it is. We are now educating the automatic bases of both mind and morals, and habits are never so easily formed or made stable. Manual training and games should be extremely diverse, manifold, and thoro. It is the time to break in the human colt, which is by nature, in some sense, the wildest of all wild animals. If the piano or any other musical instrument is to be learned, this is the time for drill, especially on scales and exercises. An instrumentalist's technique is rarely good if its foundations are not laid in this age. Names, even technical ones, come now. Drawing, too, should now come into prominence, beginning in its large and perfectly free form before writing, and only near the end of the period becoming severely methodic and accurate. Art training should not result in intimidation, but first everything should be drawn—battles, fires, shipwrecks, and railroad accidents, with plenty of human figures and action, and no angles, straight lines, or regular curves, which have come very late in the history of the race. This would make drawing, as it should be, a real expression of the child's soul, and the child should copy what he, and not what the adult, sees.

The mother-tongue will be the vehicle of nearly all the work of this period; but it will be on the short circuit from ear to mouth, which existed for unknown eons before reading and writing, and not chiefly on the long circuit and, biologically, very recent brain-path from eye to hand. Teachers praise written work in home and at school—compositions, essays, class work; but all these appeal to new and undeveloped

powers of nerve and muscle. It is because we try to establish good English upon these foundations, so precarious at this stage, that we have so much and so just complaint of bad English. We ruin both handwriting and idiomatic speech by precocity. The child should live in a world of sonorous speech. He should hear and talk for hours each day; and then he would lay foundations for terse and correct English, and would keep read-writing, as it should forever be, subordinate to hearing and speaking. He would write as he speaks, and we should escape the abomination of bookish talk. At this stage written work should be required far less than at present.

Further, to secure these ends, we must first lay stress upon correct spelling — which is, after all, of far less importance than we think — and also upon correct, adult Addisonian syntax. Good grammar is too much to expect yet. We must strive first for utterance and expression, which may be homely, if only vigorous and adequate. Hence, much that we call slang has its place, and is really a revival of English in its most formative stage. The prim proprieties we idolize are not yet, but it is the hour of delight in cogency of expression. We do not yet know what slang to teach, or how to teach it, but we ought to give the best of it an important place. The boy is not totally depraved because he loves the speech of Chimmie Fadden, of Mr. Ade, or of "The Charwoman," because such language is fresh from the mint where all words were made. Our end is the cultivation of expression, which must bring out clearly and strongly what is in the boy's soul. This expression must be of a kind at least no less effective for other boys than for us. A training that gives the power of writing, or even talking, upon any subject or upon none in particular, is bad and vicious. Children have no right to write unless it is upon some subject that they know, and upon which they feel strongly. Theme and composition should be strictly confined to the fields of interest, and then expression will find or make a vent for itself. Moreover, we should not teach language, as such, or apart from objects, acts, and concrete reality-truth. We must burn most of our language books.

At this stage, arithmetic, so greatly overdone in American schools, should be mechanized, with plenty of mental exercises, and later with rules and processes for written work, with only little attempt at explanation. The elements of geometry, especially on the constructive side, and the metric system should come early, and the rudiments of algebra later. This is the stage, too, for beginning one or two foreign languages. These should always first be taught by ear and mouth. The child has a natural desire to express himself in many other vocal forms than the vernacular, for it is the age when all kinds of gibberish, dog Latin, and inventive words culminate. It represents the stage when human speech evolved fastest. If these languages are taught earlier, they jeopardize

idiomatic English; if later, they are never pronounced or used with precision, and are not immediate vehicles of thought. Psychology has shown that speech is greatly reinforced by appeals to the eye, not in the form of the written or printed word, but thru pictures, and that even color intensifies the linguistic effect. Many a French or German word that could not otherwise be recalled is reproduced, or first taught more permanently, if the object or picture is shown, or the appropriate action is performed at the same instant. Books should be by no means discarded, but the chief stress should be laid on the oral work and thought. The object should be brought into immediate action without the intervention of the English word.

As to the dead languages, if they are to be taught, Latin should be begun not later than ten or eleven, and Greek never later than twelve or thirteen. Here both object and method are very different. These languages are taught thru English, and the eye-hand circuit should have much more prominence. Word-matching and translation are the goal. The chief reason why the German boy of fifteen or sixteen in *Unter Secunda* does so easily here what seems to us prodigious is because he is taught to study; and the teacher's chief business in class is not to hear recitations, but to study with the boys. One of the best of these teachers told me that the boy should never see a dictionary or even a vocabulary, but the teacher must be a "pony." The pupil should never be brought face to face with an unknown sentence, but everything must be carefully translated for him; he must note all the unknown words from the teacher's lips and all the special grammatical points, so that home study and the first part of the next lesson will be merely repetitions of what the teacher had told and done.

The modern school geography should be reduced to about one-fourth or even one-eighth of its present volume. It is too often a mosaic of geology, topography, physical geography, botany, zoölogy, anthropology, meteorology, and astronomy. The facts of each of these sciences, however, are not taught in their natural or logical order; but the associations are mainly those of place and contiguity, not of similarity and cause. Even in these days of correlation of studies the facts of these sciences are separated from their logical connection with each other; and by the use of a more fortuitous local association the reason is injured. Our geographies do not respect the unity of the child's mind. Their facts are connected neither with each other nor with the nascent stages of growth. The interest in primitive man and animals culminates from nine to ten; that in trade and governmental parts of geography comes from sixteen to twenty. The geographies of the last two or three years have mitigated, but by no means healed, these evils; and, as we speak of Turkey as "the sick man of Europe," we may still speak of geography as the sick subject of our curriculum.

Instead of reverencing this relic of mediævalism, as its history shows it to be, we should greatly reduce the time given to it, and should first teach *Heimatskunde*; make maps more abundant, but more incidental to every topic, especially history; develop and teach elementary and illustrated anthropology and zoölogy, broadening to elementary astronomy, geology, meteorology, and botany, taught by and for themselves to bring out their disciplinary value, and so on in ways I have here no space to dwell upon. When we have reduced the enormous time now given to geography, the elements of each of these sciences will be taught in primers—some of which are now begun before the end of this period—which will continue the nature work of the period before seven or eight.

The hand is in a sense never so near the brain as now; knowledge never so strongly tends to become practical; muscular development never so conditions mental. Muscle-training of every kind, from play up to manual work, must now begin. Instead of the Swedish or other curricularized and exactly finished objects made, we should have a curriculum of toys at first and of rude scientific apparatus later, where everything will focus more upon the ulterior use of the object than upon the process of making it. All these things will be chosen from the field of the child's interests.

Singing will be prominent in the ideal school at this age; but far more time will be given to rote singing than to singing from notes, especially at first. The chief aim will be, not to develop the power to read music, important as the place of this is, but to educate the sentiments, and especially to attune them to love of home, nature, fatherland, and religion—the four chief themes of song in all ages, past and present. Music is the language of the feelings, just as speech is of the intellect. It is as absurd to teach notes to children before they can sing well as it would be to teach them reading before they can speak. The object of musical education in the public school is to express and train the emotions, and, thru these, the will and character; to preform joys and conduct, and not to make musicians.

Reason is still very undeveloped. The child's mind is at a stage when there is little in it that has not been brought in by way of sense. We must open wide the eye-gate and the ear-gate. "Show," "demonstrate," and "envisage" should be our watchwords, not "explain." We can easily make casuists and prigs, but we jeopardize thereby the ultimate vigor of reason. Hence we should explain very little. Even with respect to morals and conduct the chief duty of the child at this age is to obey. In most cases to try to explain brings self-consciousness and conceit. This method is the resource of teachers and parents whose personality is deficient in authoritativeness. Obedience should still be a law, if not a passion. If it is lacking, this is due to imperfect character or perverted methods in adults.

In fine, this is the age for training, with plenty of space and time, however, for spontaneity and voluntary action. The good teacher is a true *Pedotrieb*, or boy driver. He needs some method, but much more matter. He or she finds relatively little sentiment, but much selfishness, bound up in the hearts of children at this age. One of the chronic errors of too fond mothers and of modern teachers is to overestimate the capacities of children, especially boys, at this age for sympathy with adult feelings or interests. The world we live in is not theirs. We are "Olympians," and can enforce our will because we are stronger. We must be tolerated and respected, and must be treated with all the forms of respect and obedience that we require; but the interest of children at this age is almost exclusively in each other, and in each other's ways, not in adults. This breaks out suddenly, but just later.

Just before this period ends, boys and girls in the ideal school will be chiefly, tho not exclusively, placed under the care of teachers of their own sex. At the close of this period the ideal child, ideally trained, will be first of all helpful and active in body and mind; will read and write well; will know a great deal about the different aspects of nature in his home environment; will not be bookish, but will already know a few dozen well-chosen books; will understand and read simple French and German; and will perhaps have a good start in Latin and Greek. Some buds of specialization will have begun to burgeon. This child will be able to play several dozen games; will know something of a number of industries; and will be able to make several dozen things that he is interested in. He will be respectful, tho not particularly affectionate, and will take pleasure in obeying those he likes, and perhaps more in disobeying those he dislikes. He will have attempted a number of organizations for teams, and will have formed a few societies, but all will have been transient. He will have some acquaintance with most of the story roots and literary monuments of the world, perhaps two or three score in number. He will sing, and will draw almost anything, not well, but intelligibly and without affectation.

Lastly, the ideal teacher at this age will be the captain of the child's soul; will be able to do some things with his or her body that the child cannot; will be able to answer most of the questions suggested by the field, the forest, the beach, the street, and their denizens; will suggest plays and umpire games; will perhaps know a little of coaching, but will be a stern disciplinarian, genial withal, but rigorous and relentless in his exactions, and intolerant of all scamped work; will love occasional excursions and expeditions; will perhaps sing, play, and draw a little; will be able to do something expertly well; and, as perhaps the culminating quality, will have a repertory of the greatest stories the human race has ever told or heard.

The ideal story-teller will prefer twilight or evening, with at least the

dim light that gives the imagination a chance over sense, perhaps with flickering flames to objectify his scenes. He will then weave the almost hypnotic charm of "Once upon a time." Thus he will repeat the tales of Ulysses, Orestes, Siegfried, Thor, King Arthur and his knights, the wanderings of Æneas and Telemachus, perhaps some tales from one or other of the great ethnic Bibles, perhaps Dante, some of the soul-transforming myths of Plato—such as Atlantis, the cave, the two steeds—Hercules at the cross-roads, perhaps some legends from ancient India, Reynard the Fox, something from Grimm and Simrock. It is a grievous wrong to permit any child to satisfy the legal requirements of school attendance without some knowledge of these things. I believe in the ethical virtue of these things almost as I believe in the Bible, for they sink deep and transform. They are the Bible of childhood, and we must not withhold them. A story brings a vast body of related facts and persons to a sharp focus. This is what most modern methods of correlation fail to attain. Such stories discipline the heart and the attention at the same time, and implant a taste for good reading and a distaste for bad. Finally, the teacher should have good manners, a uniform disposition, much joy of life, and sympathy with just this age. Some persons are made to love children in this stage most of all; some, to love adolescents; the interest of most and their service to the young are almost always specialized; and none can be equally good teachers or parents for all ages.

IV. Adolescence is a term now applied to a pretty well-marked stage, beginning at about thirteen with girls and a year later with boys, and lasting about ten years, to the period of complete sexual maturity. It is subdivided into pubescence, the first two years; youth proper, from sixteen to twenty in boys and perhaps fifteen to nineteen in girls; and a finishing stage thru the early twenties. The first stage is marked by a great increase in the rate of growth in both height and weight. It is a period of greater susceptibility to sickness for both sexes; but this vulnerability is due to the great changes, and the death-rate is lower in the early teens than at any other age. It is the time when there is the most rapid development of the heart and all the feelings and emotions. Fear, anger, love, pity, jealousy, emulation, ambition, and sympathy are either now born or springing into their most intense life. Now young people are interested in adults, and one of their strong passions is to be treated as if they were mature. They desire to know, do, and be all that becomes a man or woman. Childhood is ending, and plans for future vocations now spring into existence, and slowly grow definite and controlling.

There is often a new and exquisite sensitiveness to every breath of criticism, praise, or blame. All are anxious to know whether they are inferior or superior to others. There may be observed both a new

diffidence and a new self-assertion. The largest percentage of criminals is found in the later teens, and at this time most conversions occur also. Both pleasure and pain are vastly intensified. Pugnacity becomes very strong, as does the instinct for showing off. The large muscles and then the small develop rapidly, but are at first unenduring and clumsy. The heart and arteries are suddenly enlarged, and the blood pressure is increased. Blushing is greatly developed. Nature puts body and soul on their mettle. Heredity chiefly, and environment next, determine whether the individual can cross this *pens* successfully; whether he can molt into maturity completely without loss or arrest. New friendships and new secrets are formed; the imagination blossoms; the soul is never so sensitive to all the aspects of nature; music, which may have been studied before, is now felt; the excelsior motive or the developmental push upward makes this the very best and richest season of life. New curiosities, amounting to intellectual hungers, are felt.

Thus again a few years or even months give us a new kind of being, which demands a new environment, new methods, and new matter. Instinct, now so much wiser than reason, feels this break of continuity. It is the age when the majority leave school forever and begin life for themselves. The apex of the runaway and truancy curve is here. It is the age of spring fever, when previous life seems dead, and the soul would molt it and be done with it. It is the most vulnerable and difficult of all periods after infancy, the severest test of parent, teacher, and pedagogical methods. It is the point where, in the sequential history of the race, education has begun in every indigenous race, and from which it widens up toward the university and down toward the kindergarten, just in proportion as civilization advances and the mass of culture material grows. What we shall do with the hobbleddehoys, *Backfische*, larrikins, is the oldest problem of education, and one answer is plain: We must first study them. This process has been begun, and has yielded a few results, some very clear and some still uncertain.

First of all, the drill and mechanism of the previous period must be gradually relaxed, and an appeal must be made to freedom and interest. Individuality must have a far longer tether. We must, and can, really teach nothing that does not appeal to interests deep enough to make it seem of almost supreme value in the world. We can no longer coerce and break, but must lead and inspire. To drill merely is now to arrest. Each individual must be studied and made a special problem, if his personality is to come to full maturity. Hence, there must be a wide range of elective study for those who continue at school. Boys can hereafter rarely do their best work under female teachers, however well equipped these may be mentally. They feel their manhood, and need the dominance of male influences.

In the ideal school system the sexes will now, for a time at least,

pretty much part company. They are beginning to differ in every cell and tissue, and girls for a time need some exemption from competition. They have more power than boys to draw upon their capital of physical energy and to take out of their system more than it can afford to lose, for the individuals of one generation can consume more than their share of vigor at the expense of posterity. In soul and body girls are more conservative; males vary, differentiate, and are more radical. Reproduction requires a far larger proportion of body and function in females. Now the leaders of the new education for girls recommend training them for self-support, assuming that, if wifehood and motherhood come, those who have received such a training can best take care of themselves. This assumption is radically wrong and vicious, and should be reversed. Every girl should be educated primarily to become a wife and mother, and, if this is done wisely and broadly, the small minority who remain single will, with this training, be best able to care for themselves.


A third conclusive and far-reaching principle is that at no stage of life is the power to appreciate and apprehend so very far ahead of the power to express. Hence we should let up on examinations; we should cast our bread upon the waters, knowing that it will be found after many days, because so sensitized is the soul now that nothing is lost. Mental and moral teaching and influences sink at once too deep to be reproduced in examinations of the present type, without injury to both mind and will. There is nothing in the whole environment to which the adolescent nature does not keenly respond. Neither you nor I, however specialized our knowledge, know anything really worth knowing, the substance of which cannot be taught now if we have pedagogical tact; but, if we wait for its reproduction in the pupil, we starve and retard his soul. Hence facts, ideas, laws, and principles should be in the very atmosphere, for they are now the ingenuous youth's native breath, his vital air. He is all insight and receptivity; he has just entered the stage of apprenticeship to life; he has awakened to it as at a second birth, and has found all things new and glorious.

Yet another change is well defined. Whereas previously the pupil could work with some skill and accuracy, now body and mind are both again so plastic and unformed that they are clumsy, and precision and finish cannot be bought except at too great a price. The teacher's cue is now to graft the soul all over with buds and scions, and not to try to gather a harvest. The mind has laid aside its power to finish and elaborate. It can rudely assimilate everything by turns, but nothing well. The fundamental system of the body, which consists of the large muscles and not the small, and which therefore makes coarse, massive movements and not exact ones, has now its innings; and the fundamentals of the soul, which are instinct and intuition, and not pure intellect, are now in season. We must lay new and larger foundations.

But, more specifically, what do these changes involve in the ideal school of the future? The transition from the grammar to the high school in this country corresponds far better than the European system to the need of changed environment at the age of fourteen; and this constitutes a rare opportunity, which has, however, been thrown away. Altho education, as we have seen, begins here, and many races have no other than a brief training at the dawn of the ephebic period, by a strange irony of fate secondary education has more or less lapsed to a mere link. Its functions are partly those of preparation for college, and are partly shaped by the mere momentum of the lower grades. The high school has lost its independence, and of all stages and grades has least interest in the large problems of education, namely, what to teach and how, in order to develop the nascent periods during the teens and to save powers now new-born in most profusion, but sure to be atrophied or perverted if not studied with tact and federated with individual adaptation.

For all these problems as a class, high-school teachers care less than those of any other grade, if, indeed, they suspect their existence. For them adolescence is just a stage when children are so much farther along than in the grammar school, and know so much less than they must to enter college. For such teachers the task is simply to convert their pupils into freshmen, and they await with hope or fear the assignment of their stint in the form of college requirements. They have abandoned all initiative; have renounced their birthright of interpreting, and ministering to, the needs of one stage of life; have had little professional training; have little interest in education in the large meaning of that term; and care little for work of the lower grades. Their motto almost seems to be, *Non vitae sed scholae discimus*. The result is that boys, who insist more on their own individuality, leave the high school: in the country at large about 60 per cent. of its pupils are now girls. Noble ideals are gone; the independent function of the secondary stage of education is almost abandoned; and the pupil and teacher devote themselves to a routine of tasks in an artificial program imposed by the will of others, and fitting, not for the world, but for college. The pupils do not regard their work as set on a basis which gives it a value and meaning in itself to which each day contributes. Nothing can be done then until the high school takes a stronger hold on the interests and affections of the pupil.

At the sessions of the representatives of New England high schools and colleges, all the discussions and interests center more and more in the details of how to fit in this and that study, and whether a little more or less should be required or methods tinkered. Collège requirements, and suggestions how they may be best met, have ceased to be educational themes in any large sense. It is high time to reverse this relation. The college depends on the high school, and not *vice versa*. The latter should declare its independence, and proceed to solve its own problems in its



own way; it should strive to fit for life those whose education stops here, and should bring the college to meet its own demands. It should ask again how best to feed the interests and capacities peculiar to this age; how to fill and develop mind, heart, will, and body, rather than how to distill a budget of prepared knowledge decreed by professors who know no more of the needs of this age than teachers of other grades. The current "link" theory and practice interfere, moreover, with the natural selective functions; favor uniformity and inflexibility; and ignore the needs of the majority of high-school pupils who go no farther.

Under this condition it is idle to study adolescence or to plan for it, because nothing worth while can be done; altho the inverse relation I plead for would be vastly to the interests of the colleges, and would in a few years greatly increase their classes and the efficacy of the whole system. Few institutions of modern civilization so distrust human nature as does the modern American high school, when under college domination. For lower grades the law of compulsory attendance is analogous to a high protective tariff, which removes the stimulus to better methods of manufacture, and interferes with the law of competition which is the mainspring of evolution. The high school is no less effectively protected against the currents of new ideas, and is left to be a victim of tradition, routine, the iron law of mechanism. It takes the easiest way by working under the shelter and dictation of the college above and on the momentum of the grammar school below. This, I believe, accounts for the rapidly decreasing numbers as we go up the high-school classes; for the decreasing proportion of high-school boys who go to college; for the preponderance of girls in the high school; and for the educational apathy of the high-school teacher, who is prone to all the narrowness and affectation of the specialist, without his redeeming virtue of productiveness in research.

The teacher must teach more, and know more; he must be a living fountain, not a stagnant pool. He should not be a dealer in desiccated, second-hand knowledge, a mere giver-out and hearer of lessons. That is the chief and humiliating difference between our secondary teachers and those abroad, who are mostly doctors of philosophy, as they should be. If we could move many university professors to the college, many college professors to the high school, many high-school teachers to the grammar school, and some grammar-school teachers, with at least a sprinkling of college graduates, into the kindergarten, it would do much. In the German and French schools the teacher is one who knows a great deal about his subject and is nearer to original sources; who tells the great truths of the sciences almost like stories; and who does not affect the airs and methods of the university professor. Very many secondary teachers are masters and authorities. Here, most of our university pedagogy is a mere device for so influencing high-school principals and teachers as to

correlate curricula, in order to corral in students, and little interest is taken in the grammar grades, and none in the kindergarten.

I have spoken frankly, and have dealt only with general principles over a vast field, far too large to be adequately discussed here. I have carefully avoided all details, altho I have fully worked them out on paper at great length, for each topic to the close of the high-school period or the age of nineteen, when physical growth is essentially completed. This material will soon appear in a volume. The chief petition in my daily prayer now is for a millionaire. With the means at hand, I have no shadow of doubt or fear but that in five years from the date of any adequate gift we shall be able to invite all interested to a system of education, covering this ground, which will be a practical realization of much present prophecy, and which will commend itself even to the most conservative defenders of things as they are and have been, because the best things established will be in it. But it will be essentially pedocentric rather than scholiocentric; it may be a little like the Reformation, which insisted that the sabbath, the Bible, and the church were made for man and not he for them; it will fit both the practices and the results of modern science and psychological study; it will make religion and morals more effective; and, perhaps above all, it will give individuality in the school its full rights as befits a republican form of government, and will contribute something to bring the race to the higher maturity of the superman that is to be, effectiveness in developing which is the highest and final test of art, science, religion, home, state, literature, and every human institution.

DISCUSSION

AARON GOVE, superintendent of schools, District No. 1, Denver, Colo.—The paper to which we have just listened gives me much gratification and some surprise. It presents conclusions reached by the eminent author after years of profound thought and careful experiment. While the entire professional world is acquainted with President Hall, and has known in a general way of the philosophical and experimental work at Clark University, so far as I know this is the first presentation showing results. It does not follow that the conclusions reached by President Hall are absolute or final, neither is it necessary that agreement in the conclusions follows. The value of the paper to me is what seems to have been discovered and accomplished by almost a generation's work in investigation of the proper methods of approach to the pupil's mind. Omitting the first, or kindergarten, period, and the last, or the high-school, period, it is the treatment of the grammar school that delights me most, and serves to confirm me in my own observation and experience, because, like some other men, I rejoice when I meet accord with others. Superintendents, who often are quite as much men of action as of thought, are confronted with problems in school administration which scarcely appear to the philosopher and theorist. I understand the paper, altho I have not read it and have heard it read but once, to declare that the grammar-school period of the boy's life is the time for drill, memory-training, severe application to tasks with an accounting for their accomplishment. In other words, that what has been denominated by some of the critics "soft

pedagogy" and "mellow education" should be reduced to its minimum during the grammar-school period. If this be the tenor of the paper—and we shall all be able to read it later—it serves to restore to many doubters confidence in our pedagogical philosophers, whose teachings, often presented under circumstances of wrong interpretation, misapplication, and superficial acquaintance, have suffered in the hands of their friends. That a hive of bees in the yard or on the playground of the schoolhouse is theoretically beautiful and helpful, and has been even recommended as an essential adjunct, is an illustration of how our friends in that field have taught us that, while theory must always precede practice, practice should not always follow theory.

Some of us have complained of the time wasted in school in experimenting along lines indicated by pedagogic experts; we have had a notion that the experimenting should be limited to the smallest practicable field until tolerably right conclusions are reached, at which time the whole can enter into the practice of new and hitherto unintroduced methods.

I take this occasion, altho perhaps not strictly in line of anything said in the paper, to declare my belief in the misfortune of identical coeducation in the high schools; also my belief, based upon my immediate environment, that the grammar-school boy of today is not as well fitted for the high school as he was ten years ago; that the letting up of assignment and demanded accomplishment of tasks, the introduction of entertainment and the misinterpretation of the "doctrine of interest," have tended to make the young fellows weak in mental power, and consequently weak in grasping problems and overcoming obstacles. That the high-school girls should be differently treated from the high-school boys is my belief; because, as Dr. Hall has just informed us, of the extraordinary and positive separation in the mental, social, and physical natures, as he has demonstrated by most careful and patient experiment and investigation.

If our high schools are to be continued as coeducational institutions, the boy should take four years for his work, while the girl takes six; the boy should be held in school all day; the girl should be dismissed from the schoolhouse at noon. Not less work should be given her, rather more, but of a different kind. On account of extra calls outside of school duties, including the home, society, and music, and perhaps art; on account of changes in physical constitution, and on account of the importance of outdoor life, she can well afford to take six years to acquire that mental discipline for which four is ample for her brother.

I regard this paper as one of the most instructive presented to this Council within my recollection. I reiterate my pleasure in finding myself so close to Dr. Hall. The pleasure is heightened by the previous feeling that I had been called here to the not pleasant task of disapproving what I might hear. The paper will receive, when printed, wide attention, and careful and thoughtful essays will be written and printed thruout the land upon the many phases presented and the unusual inspiration which it contains.

MISS LUCIA STICKNEY, Cleveland, O.—Dr. Hall has told us of the need, and of the time for supplying the need, of the spiritual in the form of legend and myth. We recognize the fact that literature is the medium for the moral and spiritual in education, and we are making our boys and girls, even those who are taking a business course in our schools, familiar with the religious ideas of the ancient nations and of the peoples of the Middle Ages. We exhume them in mythology. We present the ideal in character and strength from the Greek and Roman and Norse heathenism. We dwell on the romantic in chivalry, and we seem to study to avoid the stories of our own Bible, which should be dear and sacred to every child of every faith in our schools. We seem to be afraid of what they have no prejudice against and, what is wrong perhaps, no impression of. We blush to confess the ignorance of our children of our cultivated homes as to Bible literature. We lose the best opportunities of giving them a moral lesson, apparently because we are afraid of meeting the question, which has nothing in it, at our time of liberal

thought and purpose, to be afraid of. When all are demanding the recognition of higher and deeper things in our school work, we are going out of our way to avoid the best medium at hand for bringing these things into it.

HIGH-SCHOOL STATISTICAL INFORMATION

JAMES M. GREENWOOD, SUPERINTENDENT OF CITY SCHOOLS,
KANSAS CITY, MO.

Owing to some omissions in the minutes of the Council, I found myself in a dilemma after I had received and read the proceedings of the Charleston meeting. On motion of Dr. Hinsdale, it was moved and carried that the investigation I had commenced on high schools should be continued, and that two other members of the Council should be associated with me as a committee to make a report at this meeting. Hon. Frank A. Hill, of Massachusetts, and Hon. E. W. Coy, of Ohio, were nominated, but the minutes contained nothing of this, and as neither gentleman was present at the session when the announcement was made, I was forced reluctantly to drop the matter so far as committee work was concerned, but I continued the investigation on my own responsibility.

The special report which I now submit is suggestive, and it is designed to call attention to three or four phases of thought in this department of public education. I need not dwell upon the imperfect methods, in vogue in various cities of this country, of tabulating high-school statistics, and the difficulty one experiences in collecting definite information, especially as to the persistence and character of attendance in classical, English, and manual-training high schools; the lines of work in which the greatest number of failures occur; the actual cost of maintaining such schools, based on the total enrollment; the average daily attendance, including all expenses of whatsoever nature. Many reports fail to show the total expenditures in such a way as to be of any value in the compilation of statistics.

For information concerning the attendance, reasons for dropping out of school, failure in class standing, I have drawn entirely from the schools of Kansas City, and for expenditures from several cities in different sections of the country.

Kansas City is different in some respects from any other large city of the country, in enrolling a larger per cent. of its entire population in high school, in having a larger per cent. of graduates to the entire population, and also in having a larger per cent. of pupils enrolled in the high schools in proportion to the total enrollment of pupils in all the schools, unless it be Springfield, Mass. These facts are not accidental. They are the results of definite causes that have operated for years, which I need not specify in this connection.

H.S. Statistical info.

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Last year I showed that the younger pupils who completed the ward-school work were not the ones who failed and left the high school during the first year. The reason is obvious: bright children keep up in their studies whether in high- or ward-school work. This point I think is well established.

TOTAL ENROLLMENT IN KANSAS CITY HIGH SCHOOLS

The total enrollment in the high schools was 3,602, distributed as follows: first year, 1,396—boys 567 and girls 829; second year, 900—boys 305 and girls 595; third year, 722—boys 263 and girls 459; fourth year, 585—boys 189 and girls 394.

In the first year 338 pupils left school—150 boys and 188 girls; the percentage of boys was 26.4 and of the girls 22.6; second year, 181—61 boys and 120 girls, or 19.4 per cent. of the boys and 20 per cent. of the girls; in the third year 138 dropped out—64 boys and 74 girls, or 24.3 per cent. of the boys and 16.2 per cent. of the girls; in the fourth year, 107—32 boys and 75 girls, or 17 per cent. of the boys and 19 per cent. of the girls.

Expressing the enrollment by years in per cents., 39 per cent. are first-year pupils, 25.3 per cent. are second-year pupils, 20.2 per cent. are third-year pupils, 15.5 per cent. are fourth-year pupils, while only 18.4 per cent. of the entire enrollment withdrew from school during the year.

By way of comparison on the same basis I will take the first-year pupils in the Central High School, in the Manual Training High School, in the Westport High School, and in the Lincoln High School, and note the persistence of attendance. In the Central 544 were enrolled as first-year pupils—195 boys and 349 girls. Now, 55 of these boys and 78 of the girls left school during the year, or 28.2 per cent. of the boys and 24.4 per cent. of the girls. In the Manual Training High School the first-year pupils numbered 673—313 boys and 360 girls. Eighty-two of the boys left school and 72 of the girls—total, 154; expressed in percentage, 26 per cent. of the boys and 20 per cent. of the girls. But in the Westport High School the total enrollment in the first-year class was 64—21 boys and 43 girls. Two boys left this class and 10 girls, or 9.5 per cent. of the boys and 23 per cent. of the girls.

In the Lincoln High School, a school for negro children, the first-year class consisted of 38 boys and 112 girls. Eleven boys left school and 28 girls, or nearly 29 per cent. of the boys and 25 per cent. of the girls.

If these first-year statistics prove anything, persistence of attendance is better in a small high school than in either a large classical high school or a large manual-training high school. A better reason, I think, is that

the Westport boys started into school as a business and a considerable number of others as an experiment. Furthermore, the persistence of attendance of the first-year pupils within certain limits is variable in this same school from year to year and is dependent upon local influences. The variation will probably range from 3 to 10 per cent.

ENROLLMENTS AND WITHDRAWALS BY SCHOOLS

CENTRAL HIGH SCHOOL

The total number of pupils enrolled in this high school during the year was 1,686—boys 552 and girls 1,134. There were 544 enrolled in the first year, 437 in the second, 371 in the third, and 334 in the fourth, and from which 254 pupils graduated, or about 68 per cent. of the fourth-year pupils. Of the pupils enrolled, 1,336 were promoted from the Kansas City ward schools, 245 from other schools, and 5 had been admitted by examination from the outside. Out of 1,336 Kansas City pupils enrolled in the four classes, 256 dropped out of school during the year, and out of 350 admitted from other schools, 91 were dropped; or 19 out of every 100 of the Kansas City pupils left school, while 26 out of every 100 of the outsiders dropped out. This may be expressed as follows: 27.7 per cent. of the Kansas City boys and 15 per cent. of the Kansas City girls belonging to the first year left school, while 32 per cent. of the boys and 44 per cent. of the girls who were admitted from outside schools dropped out. Grouping both classes of pupils together, the percentage of the boys that left school was 28, and of the girls 22.3, and the total percentage of both sexes belonging to the first year, 24.4.

The total number of pupils enrolled in the second year's work was 437—134 boys and 303 girls. Of this number, 108 boys and 244 girls had been promoted from the Kansas City ward schools, and 26 boys and 59 girls from other schools. From the Kansas City boys 18.6 per cent. left school, and from the girls 15.1 per cent. Among the outside pupils 15.66 per cent. of the boys dropped out of school and 34 per cent. of the girls. Putting both classes together, 18 per cent. of the boys and 18.6 per cent. of the girls withdrew, and the per cent. of withdrawals of both sexes is 18.5.

The third year shows an enrollment of 371 pupils, there being 280 from Kansas City schools and 91 outsiders. There were 52 pupils that dropped out of the Kansas City contingent and 19 out of the others. Designating by sexes, 23.6 per cent. of the Kansas City boys and 15.8 per cent. of the girls quit school, while of the outsiders 20.6 per cent. of the boys and 21.37 per cent. of the girls quit school; or, putting the two classes together, 22.9 per cent. of the third-year boys and 17 per cent. of the girls left school, and 19.1 per cent. of the class.

Total number of the fourth-year pupils was 334—92 boys and 242

girls; 260 of these were from the Kansas City ward schools — 72 boys and 188 girls, while 20 boys and 55 girls were admitted or came from outside schools. Seventeen boys and 37 girls from the Kansas City boys and girls dropped out of school, and 4 boys and 4 girls from the outside withdrew. The per cents. of the totals for the fourth year are 22.7, 16.9, and 18.5, respectively.

MANUAL TRAINING HIGH SCHOOL

The total enrollment in the Manual Training High School was 1,493, there being 628 boys and 865 girls; these are distributed by years as follows: first year, 673—313 boys and 360 girls; second year, 363—139 boys and 224 girls; third year, 268—104 boys and 164 girls; fourth year, 148—64 boys and 84 girls.

There were 42 post-graduates in the school—8 boys and 34 girls. Not counting the post-graduates, 1,275 of these pupils were promoted from the Kansas City ward schools, 154 from other schools, and 22 were admitted by examination. Of the 286 boys and 287 girls in the first year from Kansas City ward schools, 71 boys and 59 girls quit school, or 24.8 and 20.4 per cent. respectively. Of 20 boys and 60 girls admitted from other schools, 55 and 21.6 per cent., respectively, quit, while of the 22 admitted by examination none left school. Grouping the first-year pupils together, 26.2 per cent. of the boys and 20 per cent. of the girls withdrew from school, or an average of both sexes of 22.8 per cent.

The total number of second-year pupils was 363, of whom 139 were boys and 224 girls. Of this number 124 boys and 181 girls were from Kansas City ward schools, 15 boys and 42 girls from other schools, and 1 boy admitted by examination. The number that left school was 25 boys and 48 girls, or 18 per cent. of the boys and 21.4 per cent. of the girls.

In the third year there were 104 boys and 164 girls; total, 268; the total number that left school was 50—29 boys and 21 girls. All of this class except 13 had entered school from the Kansas City ward schools. Twenty-eight per cent. of the boys and 12.3 per cent. of the girls left school during the year.

There were enrolled in the fourth-year class 189 pupils—72 boys and 117 girls—42 being post-graduates. Not counting post-graduates, only 5 boys and 8 girls left the class during the year, while 3 boys and 12 girls quit. But grouping them as was done in the other schools will increase the percentage of boys to 11.5 per cent. and of the girls 19.4 per cent., respectively. The total for both sexes separately was, for the boys 22.9 per cent., for the girls 18.5 per cent., and for the school 20.4 per cent.; but the percentage of the boys from the Kansas City ward schools that dropped was 26.2 per cent., and of the girls 17 per cent., and of those admitted from the outside, 42.5 per cent. of the boys and 20

per cent. of the girls. Of this class 130 pupils graduated, or 68 per cent., the same as from Central High School.

THE WESTPORT HIGH SCHOOL

This is a small, but excellent, high school, in which 193 pupils were enrolled—65 boys and 128 girls. The first-year class was composed of 64 members—21 boys and 43 girls. Two boys only dropped out, and 10 girls; that is, 9.5 per cent. of the boys and 23.3 per cent. of the girls.

In the second-year class 54 were enrolled—20 boys and 34 girls; 5 boys and 5 girls left school, or 25 per cent. of the boys and 20.5 per cent. of the girls.

The third-year class consisted of 44 members—12 boys and 32 girls, of whom 3 boys and 5 girls withdrew from school.

In the fourth-year class were 12 boys and 19 girls. No boys and only 2 girls withdrew from this class during the year. The withdrawals for the boys from the entire school was 15.58 per cent., and of the girls 19 per cent. The fourth-year class furnished 25 graduates, or 80.6 per cent. of the entire class.

LINCOLN HIGH SCHOOL

This is a high school for the negro children of Kansas City. The total number of pupils enrolled was 231—79 boys and 152 girls: in the first-year class, 38 boys and 77 girls; second-year, 12 boys and 34 girls; third-year, 16 boys and 23 girls; and in the fourth-year, 13 boys and 18 girls. Out of the first-year class of 115, 11 boys and 28 girls left school; of the second-year class of 46, 7 boys and 8 girls were withdrawn; of the third-year class of 39, 7 boys and 8 girls were withdrawn; and of the fourth-year class of 31 pupils—13 boys and 18 girls—were withdrawn 2 boys and 7 girls. The percentage of withdrawals for the first year from the entire class was 34; second year, 32.6; third year, 38.4; and from the fourth year, 29.1.

THE NUMBER OF GRADUATES

There were enrolled in the Kansas City High Schools, as previously stated, for the school year closing June 30, 1901, 3,602; the average daily attendance was 2,855, and the number of graduates 440, as follows: from the Central High School, 254; Manual High School, 130; Lincoln High School, 31; Westport High School, 25; at the Central High School, 77 boys and 177 girls; Manual Training High School, 56 boys and 74 girls; Westport High School, 12 boys and 13 girls; Lincoln High School, 13 boys and 18 girls.

The percentage of graduates from each school to its entire enrollment was: Central High School, 15.1; Manual Training High School, 8.7; Westport High School, 13; Lincoln High School, 13.4.

SUMMARIZING THE WITHDRAWALS

	Per cent. boys	Per cent. girls	Per cent. total
First year :			
Central High School	28	22.3	24.4
Manual Training High School.....	26	20	22.8
Westport High School.....	9.5	23.3	19
Lincoln High School.....	31.6	35.5	34
Second year :			
Central High School	18	18.6	18.5
Manual Training High School.....	18	21.4	20
Westport High School.....	20	20.5	22.2
Lincoln High School.....	58.3	23.5	32.5
Third year :			
Central High School	28	12.3	21.8
Manual Training High School.....	28	12.3	21.8
Westport High School.....	26	16	18.1
Lincoln High School.....	12.5	30	23
Fourth year :			
Central High School	22.7	16.9	18.5
Manual Training High School.....	11.1	17.1	15
Westport High School.....	...	10	6.4
Lincoln High School.....	15.4	33.3	29.1

Considerable discussion has occurred in regard to the large number of pupils who leave the high school during the first year owing to the repulsive nature of some of the studies which the boys are required to pursue. I never attached much importance to this argument, and, as a consequence, I decided to collect some statistics from the three upper grades of our ward schools bearing upon withdrawals as compared with that in the high schools. The results throw some additional light on the subject. In the fifth grade of our ward schools there were enrolled for the year just closed 2,846—1,335 boys and 1,511 girls; 350 boys and 318 girls withdrew, making a total of 668 pupils, or 26.1 per cent. of the boys and 21 per cent. of the girls of the entire number. There were 2,271 pupils in the sixth grade; 257 boys and 244 girls withdrew, making a total of 501, or 25.3 per cent. of the boys and 19.4 per cent. of the girls, and 23 per cent. of the whole number. In the seventh grade there were enrolled 1,700 pupils—747 boys and 953 girls; 173 boys and 141 girls left—total, 314; or, expressed in per cents., 23.1 per cent. of the boys and 14.8 per cent. of the girls, and 18.4 per cent. of the grade.

SUMMARIZED BY GRADES

V	VI	VII
1,335 } 26.1 per cent. boys 350 }	1,013 } 25.3 per cent. boys 257 }	747 } 23.1 per cent. boys 173 }
1,511 } 21 per cent. girls 318 }	1,258 } 19.4 per cent. girls 244 }	953 } 14.8 per cent. girls 141 }
2,848 } 23.4 per cent. both 668 }	2,371 } 22 per cent. both 501 }	1,700 } 18.4 per cent. both 314 }

FAILURES IN CLASS STANDING AND IN SUBJECTS

CENTRAL HIGH SCHOOL

The total number enrolled in this school was 1,686—552 boys and 1,134 girls. The total number of boys that failed in class standing was 133, and girls 214—total 347. The causes assigned are: sickness, 26 boys and 64 girls; sickness in family, 12 boys and 9 girls; failing eyesight, 1 boy and 11 girls; too much attention to society, 5 girls; inability to do the work, 4 boys and 7 girls; to go to work, 43 boys and 18 girls; transferred, 10 boys and 21 girls; left the city, 11 boys and 32 girls; unknown causes, 32 boys and 47 girls.

MANUAL TRAINING HIGH SCHOOL

The reports from this school are very complete in every respect. The total enrollment was 628 boys and 865 girls. The failures in class standing in departments are as follows: in English, 90 boys and 85 girls; in mathematics, 127 boys and 125 girls; in science, 46 boys and 53 girls; in history, 40 boys and 47 girls; in zoölogy, 32 boys and 36 girls; in foreign languages, 13 boys and 17 girls; in physics, 19 boys and 8 girls; in electricity and steam, 13 boys.

Summary.—Sickness, 53 boys and 172 girls, total 225; sickness in family, 5 boys and 24 girls, total 29; failing eyesight, 14 girls, total 14; too much attention to society, 5 boys and 13 girls, total 18; inability to do the work, 54 boys and 70 girls, total 120; football, 1 boy, total 1; to go to work, 155 boys and 26 girls, total 181; transferred, 13 boys and 6 girls, total 19; left the city, 34 boys and 51 girls, total 85; causes unknown, 116 boys and 100 girls, total 216. Totals, 436 boys and 476 girls; grand total, 912.

REMARK.—It will be observed that one pupil may be marked "failure" in one, two, three, or even four subjects.

Failures in subjects.—The failures accredited to the first-year pupils in the Manual Training High School were 580—boys 285 and girls 295; in English, 106—57 boys and 49 girls; in mathematics, 202—93 boys and 109 girls; in science, 53—32 boys and 21 girls; in history and civics, 39—14 boys and 25 girls; in zoölogy, 49—26 boys and 23 girls; in foreign languages, 22—10 boys and 12 girls; in steam and electricity, 13 boys; in modern languages and Latin, 96—40 boys and 56 girls.

The failures among the second-year pupils amounted to 231—English having 59; modern languages and Latin, 53; mathematics, 49; history and civics, 29; science, 26; zoölogy, 16.

The total failures in the third-year class were 90—50 boys and 40 girls; the largest number in any one group was in physics, 27, and the next in English, 24, and the lowest was in Latin, 5. There were only 34 failures in the fourth-year class, 14 in English, and 12 in other languages.

WESTPORT HIGH SCHOOL

The total number of failures out of 193 pupils was 33—8 boys and 25 girls, as follows: sickness, 2 boys and 7 girls; sickness in family, 2 boys and 5 girls; to go to work, 3 boys and 5 girls; left the city, 1 boy and 6 girls; failing eyesight, 2 girls.

Failures in subjects.—In history, 3 boys and 3 girls, total 6; in physics and chemistry, 3 girls, no boys; in mathematics, 5 girls; in modern languages, 4 girls; in Latin and Greek, 2 boys and 2 girls, total 4; in English, 2 boys and 5 girls, total 7; in biology and physiology, 1 boy and 3 girls, total 4.

LINCOLN HIGH SCHOOL

Causes of failure.—Sickness, 4 boys and 43 girls, total 47; sickness in family, 18 girls, total 18; too much attention to society, 18 girls, total 18; inability to do the work, 8 boys and 26 girls, total 34; to go to work, 48 boys and 39 girls, total 87; left the city, 13 boys and 16 girls, total 29; unknown causes, 12 boys and 13 girls, total 25. Totals, 85 boys and 173 girls; grand total, 258.

Failures in subjects.—In mathematics, 20 boys and 43 girls, total 63; in history and biology, 7 boys and 8 girls, total 15; in languages, 18 boys and 36 girls, total 54; in English, 20 boys and 43 girls, total 63; in science, 20 boys and 43 girls, total 63.

COST OF MAINTAINING PUPILS IN HIGH SCHOOL

I have been only moderately successful in securing data on this subject. Many reports are strangely mute on this topic. With a thoughtful person one of the first questions is what it will cost, and I believe that this is a pertinent inquiry in regard to all school questions. To put it another way: How far can a community afford to tax itself constantly in order to support and maintain an adequate system of public schools? The following will throw some light on the subject in the cities mentioned:

Boston.—Edwin P. Seaver, superintendent: Net cost of educating 5,766 resident pupils in the Boston Normal, Latin, and High Schools, \$507,377.81; average cost of each resident pupil, \$87.99.

Columbus, O.—J. A. Shawan, superintendent: High-school enrollment, 2,053; cost per pupil on total enrollment, \$40.41; cost on average daily attendance, \$49.10.

Cleveland, O.—Edward L. Harris, superintendent: The per capita cost is \$32.80, based on high-school enrollment, and \$39.84, based on average daily attendance.

Cambridge, Mass.—Francis Cogswell, superintendent: Total enrollment: Latin, 472; English High, 572; Manual Training, 212. Average daily attendance: Latin, 385; English High, 491; Manual Training, 183. Cost per pupil on total enrollment: Latin, \$52.45; English High, \$50.89; Manual Training, \$101.32.

Chicago, Ill.—E. G. Cooley, superintendent: Total enrollment, 10,241; cost per pupil on total enrollment, \$51.50; cost on average daily attendance, \$58.62.

Denver, Colo.—Aaron Gove, superintendent: Total enrollment: High School, 827;

Manual Training, 381. Total cost on enrollment: High School, \$47.17; Manual Training, \$79.74. Total cost on average daily attendance per pupil: High School, \$58.48; Manual Training, \$96.76.

Detroit, Mich.—W. C. Martindale, superintendent: Total enrollment, 2,716; cost on enrollment, \$45.32; total cost on average daily attendance, \$51.12.

Indianapolis, Ind.—C. N. Kendall, superintendent: Total enrollment, 2,058; cost on total enrollment per pupil, \$27.45; cost on average daily attendance, \$34.10.

Los Angeles, Cal.—James A. Foshay, superintendent: Total enrollment, 1,357; cost per pupil on total enrollment, \$35.85; cost on average daily attendance, \$38.20.

Louisville, Ky.—E. H. Mark, superintendent: Total enrollment: Boys' High, 378; Manual Training, 244; Girls' High, 751; Colored High, 295. Total cost on enrollment: Boys' High, \$60.92; Manual Training, \$108.84; Girls' High, \$42.19; Colored High, \$31.87. Total cost on average daily attendance: Boys' High, \$69.14; Manual Training, \$130.12; Girls' High, \$49.27; Colored High, \$40.

Milwaukee, Wis.—H. O. Siefert, superintendent: Total enrollment, 1,810; cost per pupil on total enrollment, \$43; cost on average daily attendance, \$53.91.

New York.—Total enrollment, 1,461; cost on enrollment, \$58.55; on average daily attendance, \$77.61.

New Bedford, Mass.—Total enrollment, 524; total cost on enrollment per pupil, \$49.32; cost on average daily attendance per pupil, \$76.44.

New Orleans, La.—Warren Easton, superintendent: Total enrollment, 944; total cost per pupil on enrollment, \$49.04; total cost on average daily attendance, \$50.73.

Omaha, Neb.—C. G. Pearse, superintendent: Total enrollment, 1,518; total cost per pupil on enrollment, \$36.89; cost on average daily attendance, \$46.98.

Providence, R. I.—H. S. Tarbell, superintendent: Total enrollment, 1,857; total cost on enrollment, \$70.14; cost per pupil on average daily attendance, \$86.39.

Rochester, N. Y.—Milton Noyes, superintendent: Total enrollment, 1,019; total cost on enrollment per pupil, \$41.21; total cost on average daily attendance, \$44.92.

St. Louis, Mo.—F. Louis Soldan, superintendent: Total enrollment: white, 1,993; colored, 250. Cost of enrollment: white, \$52.42; colored, \$52.54. Total cost on average daily attendance: white, \$62.28; colored, \$71.01.

San Francisco, Cal.—R. H. Webster, superintendent: Total enrollment, 1,625; total cost per pupil on enrollment, \$89.35; cost on average daily attendance, \$97.

St. Paul, Minn.—Irwen Leviston, superintendent: Total enrollment, 1,741; cost on enrollment, \$35.36; cost on average daily attendance, \$42.23.

Springfield, Mass.—Thomas N. Balliet, superintendent: Total enrollment, 657; cost on enrollment is not given; total cost on average daily attendance, \$65.70.

Toledo, O.—W. W. Chalmers, superintendent: Total enrollment, 1,261; total cost on enrollment, \$30.98; total cost on average daily attendance, \$34.42.

Kansas City, Mo.—(1899 and 1900): Total enrollment, 3,464; cost per pupil on enrollment, \$39.06; cost on average daily attendance, \$49.08. Cost per pupil in the Central High School on enrollment, \$34.22; cost on average daily attendance, \$41.70. Cost per pupil in the Manual Training High School on enrollment, \$45.11; cost on average daily attendance, \$58.46.

RECOMMENDATIONS

That a committee be appointed to collect, tabulate, and report information on the persistence of attendance during the last three years of ward-school work and on all kinds of high-school work, including manual-training high school, with the view of determining:

1. What effect has manual-training work upon legitimate high-school work as to scholarship and proficiency in the several departments of

study ; and if there be a tendency to emphasize unduly the manual-training work, is the regular academic work weakened ?

2. Whether the desire to work with tools seizes most strongly upon the pupil during the ward-school period or in the high school.

3. Whether the trend now in the manual-training high schools is toward special trades rather than general culture.

4. What should be the sphere of manual-training courses of study in regard to the ancient and modern languages ?

5. Whether the tendency to multiply courses of study in high schools has not been at the expense of thoro preparation in the most essential branches.

6. What causes so much pilfering among high-school pupils, and how may it be corrected ?

DEPARTMENT OF CHILD STUDY

SECRETARY'S MINUTES

NOTE.—The Departments of Kindergarten Education and Child Study held joint sessions. The minutes and proceedings are accordingly brought together in the volume.

WEDNESDAY, JULY 10, 1901

The first of the joint sessions of the Departments of Kindergarten Education and Child Study was held under the auspices of the Child Study Department, and was called to order at 3 o'clock P. M. in the Woodward Avenue Baptist Church.

The president, Dr. Thomas P. Bailey, of Chicago, and vice-president, Miss Marion Brown, of New Orleans, were absent. President G. Stanley Hall of Clark University was called upon to preside.

The following nominating committee was appointed to report nominations for officers for 1902:

Theodore B. Noss, principal of Normal School at California, Pa.

Miss Bettie E. Dutton, Cleveland, O.

Miss Clara W. Mingins, supervisor of kindergartens, Detroit, Mich.

The chairman announced a reception to be given by Miss Grace Fletcher to members of the Kindergarten and Child Study Departments at No. 814 Jefferson avenue.

After a piano solo by Mrs. Ethel Roe Lindgren, of Chicago, Ill., President Hall welcomed the large audience in behalf of the two departments. He emphasized the appropriateness of joint sessions for these departments, and announced the general topic for both sessions of the two departments as "The Rhythm of Work and Play."

"Work and Play for the Kindergarten Child" was the subject of the first paper, by Mrs. Alice H. Putnam, of the Chicago Froebel Institute.

Music — violin solo, by Miss Farrell.

"Work and Play for the Child in the Primary and Grammar Grades" was presented by Miss Charlotte M. Powe, supervisor of primary grades, Columbia, S. C.

President Hall opened the discussion of the two papers.

Following the discussion, the nominating committee presented the following nominations for officers for the ensuing year, viz.:

For *President*—Superintendent H. E. Kratz, Sioux City, Ia.

For *Vice-President*—Miss Jennie Warren Prentiss, Cleveland, O.

For *Secretary*—Miss Kate Hopper, Detroit, Mich.

The report of the nominating committee was accepted without dissent and the nominees declared elected as officers for the ensuing year.

MANFRED J. HOLMES, *Secretary*.

DEPARTMENT OF KINDERGARTEN EDUCATION

SECRETARY'S MINUTES

THURSDAY, JULY 11, 1901

The second joint session of the Kindergarten and Child Study Departments of the National Educational Association was held Thursday, July 11, 1901, at 3 o'clock P. M. in the Woodward Avenue Baptist Church.

The meeting was called to order by the president, Miss Evelyn Holmes, of Charleston, S. C.

Miss Grace Brown, of Detroit, gave a vocal solo, entitled "A Barque at Midinglet," *Lambert*, which was followed by the president's address, by Miss Evelyn Holmes, Charleston, S. C.

After another solo by Miss Brown, Miss C. Geraldine O'Grady read a paper entitled "Necessary Elements of Work and Play."

Mrs. Ethel Roe Lindgren read a paper on "Rhythm in the Kindergarten," which she illustrated on the piano.

The discussion was opened by Superintendent Charles H. Keyes, of Hartford, Conn., who was followed by Miss Mary Adair, of Philadelphia, Pa.

The nominating committee, consisting of Mrs. Putnam, of Chicago; Miss Adair, of Philadelphia; and Miss Julia E. Youngs, of Detroit, presented its report, as follows:

For President—Miss C. Geraldine O'Grady, of New York city.

For Vice-President—Miss C. W. Mingins, of Detroit, Mich.

For Secretary—Miss Mary May, of Salt Lake City, Utah.

The report was accepted and adopted, and the nominees were declared elected as officers of the department for the ensuing year.

The Committee on Resolutions reported the following:

Resolved, That the kindergartners attending the convention express their gratitude to the home committee, which so carefully provided for their comfort and pleasure; to the board of trustees of the Baptist Church, for the beautiful auditorium and airy, restful parlors; to the press of the city, for its reports of the meeting; to the ladies who furnished the delightful music; to Mr. Breitmeyr, for his generous provision of flowers; to Misses Grace Fletcher, Irene Farquhar, Clara W. Mingins, and the other hostesses, for the charming reception and other hospitalities.

(Signed) FLORENCE LAWSON, *Chairman*.
ETHEL ROE LINDGREN.
C. GERALDINE O'GRADY.

After the resolutions were unanimously adopted, the meeting adjourned.

CLARA W. MINGINS, *Secretary*.

On Friday afternoon, July 12, a parents' conference was held in the Woodward Avenue Baptist Church under the auspices of the Kindergarten Department, Miss Evelyn Holmes, president of the Kindergarten Department, presiding. A large number were present, including many noted speakers, and the session was both interesting and helpful.

PAPERS AND DISCUSSIONS

WORK AND PLAY IN THE KINDERGARTEN

MRS. ALICE H. PUTNAM, SUPERINTENDENT CHICAGO FROEBEL ASSOCIATION, CHICAGO, ILL.

It has been said that "that which is the truest sign of a thing is also its chief ornament and blessedness." So we may rightly open up the topic for this afternoon with a few words on the general activity of little children, for surely that is one of the fascinating phases of childhood, and it is one of the essentials for the well-being of the child himself.

The interests of a child are continually changing, and consequently the forms in which these interests manifest themselves in play or work are contingent upon each other, and it is not so much one deed that enables us to determine the form, as what the child continues to do that gives the action its essential characteristic. There is a rhythm, a recurrence of certain stimuli, in the secret domain of a child's life, which will result in the repetition of its effects with more or less regularity. These recurrences follow each other very rapidly, and the alternations from work to play, and play to work, are often so quick that one needs to watch closely to determine which is the dominating impulse. A few weeks ago I had the care of a three-year-old boy who was playing horse with a rocking chair. It was not easy for him to adjust the trunk strap which he was using for traces, for it was too long and heavy. All at once the child dropped the "make believe" and said: "Wait a minute, I'll get a hammer and a sharp nail and make some other holes." This he did, and, after a few moments of earnest, conscious effort at leather work, he at once went back to the play and said: "Now, Miss Ginger [the horse's name], you're hitched up; now let's see you go"—taking up the play just exactly where he had left off. This interruption of work by play, or play by work, is very noticeable in the kindergarten, and with little children everywhere.

It often seems that the child's activity is like a crystal with many facets, which reflect the light differently according to one's point of view. Now it is a purely individual thing, very transitory; then again, when one comes to take into account the stages of growth; when we get, as it were, a perspective of what the child has done, as well as what he is now doing, we can feel that there is more or less of a rhythmical "beat" in it all.

Any scheme of education which recognizes the *life* of children must in some way be able to meet the *law* of that life. Psychology is teaching

us that there is a physical basis for this ebb and flow of interests. There are certain physical wants first that must be met. These in the beginning are iron necessities, and are not to be overlooked. I do not mean only the desire and need for food, shelter, clothing, but also the equally important protection and nourishment and scope for the child's feeling and thought. There must be food for the sense-perceptions that can be easily assimilated; shelter and protection for right instincts and impulses, that out of them can come a self-determining rational power. These must be garments woven out of the truths of nature and life and spirit; and yet in the beginning the child has to clothe himself with the appearances of things.

The parent and teacher must consider all conditions for activity. We need a warning just here. The child plays his part in many and varying "tempos." There are often discords, when the parent or teacher fails to recognize the child's part, or, if he does estimate its worth, it is too much from an adult standpoint. On the other hand, a little child is constantly coming upon what he might call, were he able to name them, contradictions or oppositions. How shall he interpret them? For, whether they are understood or not, he must act. And the difficult thing for us is the fact that the action itself cannot always be relied on as a clue to the inner motive, and we write him down as dull or lazy because he has not responded to what we suppose is the motive force. Hence the necessity for great scope in planning for the work and play of our children. While one would not want to call a child's attention to the rocks over which he must climb, yet difficulties are there, and children know it. I think it was this that led Froebel to try to help the child solve these riddles with a few things which always behave the same way, for if in concrete ways the child could master some of his problems, when the more abstract propositions of life loomed up, he would be more ready to feel that these, too, could be satisfactorily met.

I find it hard to separate, to my own satisfaction, the social and individual results of these two factors on the life of the children. There are so many threads binding man to man that it is not easy to see the warp and woof of the fabric, especially in this very early stage of growth. Just as a healthy body is built up out of the harmonious work of all the organs, so I think there comes into the kindergarten and the home, with every bit of good individual work just as much as with play, a translation of it into an *esprit de corps* which touches all in the little community. So also the benefits of the social game, the play of the kindergarten, affect the individual. Without this action and reaction on the one and the many, the spirit of the kindergarten is lost. I confess that one of the charms of kindergarten and nursery life to me is that here one does not have to stop and analyze and discriminate so closely as to motive and result and method as with older children. After all, the

first years of a child's life are like a picture or piece of music that we may look at or listen to first, as a whole, without a feeling of the necessity for having a critical analysis of all that the artist meant or felt when he painted or wrote. Tho the teacher and parent may see the end from the beginning, yet the right end can be reached in no other way than by the right use of very broad generalizations concerning work and play. It seems to me that the unifying of the two is one of the very best things that Froebel did; and it is almost a pity to try to separate them, for one is as the heart, the other the brain, and both must grow and be worked out together.

In regard to the self-compelling "must," or "have to," as being in evidence in play, as well as in work, it seems to be true that children feel the need of it within certain limits. The game has its laws, and the children individually and collectively yield to them, but no farther than, to their minds, the situation requires; and woe betide the playmate who undertakes to construe the law too arbitrarily or in too lax a fashion from that prescribed by custom and tradition. Without certain restrictions the form and spirit of the play would be lost. An interesting experience which illustrates this came to me some time ago. A group of boys were playing with one of the large toy patrol wagons, and one of them suggested that they play they were a "fire company." They made a "run" or two with the wagon as it was, but very soon—almost at once—they felt that the "machine" was not telling the story they wanted it to tell. It had to be wholly reconstructed; a boiler was added; a part of an old gas stove served for the furnace; the whole thing was repainted; officers were chosen and uniforms made. The whole scheme originated in what I think Dr. Bailey would call the adaptive "must." It was work; for these definitely purposed results were consciously attained. The boys went day after day to the engine house of the nearest fire company, to study its details of construction. It was play, in the sense that they had freedom in the carrying out of their designs, and in that it was all a "make believe," and they knew it. In a similar way the kindergarten child knows that the ball is not a bird, nor the doll a baby; but in so far as it serves an ultimate form for their ideas of the bird or baby, it *is* such for the time being.

When the "must" comes from within, one finds it easier to bow before it, and if, with an obedience, one feels a growth—if one can see satisfactory results—any amount of courage and hope is conserved. I think children feel this as much as we do.

In the kindergarten there are two conditions to be met. The material for work and play should not only be such that the child can express his own images, but if the medium is worth anything, either from an artistic or a scientific standpoint, it, too, is subject to law; and the sooner a child obeys the suggestions of his material, the

sooner he will know the law back of it; and this is a means to a larger use and greater freedom. When one sees how readily a child conforms to what he himself feels to be reasonable, it seems inconsistent and inartistic for us to fail to find, as Froebel says, "ways and means thereto."

If work-products do make for a greater sense of individual force—and probably they do—it seems to me that a child should have the right to accumulate for a time those things which stand to him as an embodiment of that to which he can refer, as one would to a working capital; it is a good thing to have his experiences in such form that he can get at them. To illustrate what I mean, I would refer to a custom of the past in some kindergartens of putting the children's work—sewing, weaving, etc., etc.—into scrap-books, preserving in its placing a certain logical and successive arrangement. This was discarded by many; first, because it was feared that the child placed undue value on the result, rather than on the effort, and that we were forcing him to see logical arrangements; secondly, because the character of the work itself changed, and became bulkier, and it could not be so placed; and, thirdly, because it was thought that a certain spirit of unselfishness could be fostered, if the child knew from the outset that the work was not for self.

I am beginning to wonder if the plan has not something to recommend it. The first objection surely was not quite just. We all need rewards, more or less, to hold us to our true work. To the child these must be, in the beginning, more or less external—that is, the work itself must, in his eyes, be a thing of value or beauty. These rhythms in arrangement (if I may use the word in that way) recall the effort he made in producing them, more or less vividly. The second objection has little weight, for in the construction work there could be a plan of arrangement that would teach lessons of order and development just as well, and perhaps go more directly to primitive industrial experiences. Nor do I think the third criticism valid; for, in trying to hasten the development of an altruistic spirit, we are apt to weaken its truth and vital strength—it is strained, as the premature use of nerve or muscle can be strained. The child may or may not be interested in reviewing the order of his work. I am not at all sure that the logic of it always has a claim on him; but I am not willing that you should say that he does not feel something of it. If we believe in rhythm, there is no reason for shutting it off anywhere it might naturally appear. I know, from the interest children take in reviewing what they have done, that, in spite of the fact that their work-products are diffusive and often quite superficial, there are germs of those qualities which are also intensive and permanent, and which need to be nourished.

Many of the criticisms of the kindergarten have had a reasonable foundation in the isolations which have come into it thru too much

analysis and too much classification in its means of growth. Its directed work has been separated from its free work and play; its freedom from its obedience; the laws of impression have been considered without a well-defined and full realization of the need for fuller expression. The kindergartner and the critic have both wearied themselves in trying to reconcile isolations, when, if there had been a fuller grasp of the whole idea, less exploiting of fragmentary matters, fewer claims as to what the kindergarten might, could, would, or should do—simply seeing to it that the conditions for the work and play of these children were the best that we could make—it would not have taken so long for it to become an integral part and parcel of the accepted plan for elementary education. Froebel says that “even the eternal ideal is following, passive in its requirements concerning the form of being.” Kindergartners have not behaved as if they believed that, and the sooner they school themselves to take a more scientific attitude, suspending judgment until the larger educational truths are verified, the better for us all. On the other hand, where these have been demonstrated, we have a right to act, we must act, in obedience to them; yet methods in dealing with little children—indeed, it is true of all applied methods—so easily become “prescriptive” and “categorical” and “interfering”! When we would avoid this, it is so easy to fancy that we have given the child freedom, when in reality he has nothing but license!

Unquestionably the sense of real freedom, which a kindergarten child feels, does make for individuality, but unless this is balanced by what I understand by Dr. Bailey's adaptive “must” in both play and work, the child's social consciousness cannot increase, and consequently he will be only half developed.

In play, a child leaves behind him his own personality; even the thing he plays with must obey the same rule, and be something other than it is. Papa's cane is the galloping horse. Broken bits of crockery are like mamma's dishes; the doll becomes the baby. The child takes into himself the images of the personality for which he stands, and becomes the storekeeper, the engineer, the parent. Play becomes social when the outsiders, whether children or adults, enter fully into these situations, when the originator's enthusiasms and illusions become theirs. Work may be more intensive and concentrative for an individual, but, after all, what is its value unless its results are shared? By this, it may become as social in its character as play, and unless this does happen, its products, whether of mind or hand, will bring about a restless selfishness which prevents a broader outlook even into work itself.

The child fancies that he acts purely from his own initiative, when the truth is that the environment and the situation have made just this course of action, and no other, a necessity. The activity changes its form, and is carried on on quite other lines than that in which it began;

but he is led by these very conditions to do the best that he can under the limitations imposed by circumstance and material.

Froebel's views with regard to these changing states, or states of the child, are very inclusive, and are applicable from the nursery and the kindergarten to the university.

Briefly stated they are these :

1. That the means for attaining the end for which man is created are inherent in the constitution of man as God made him—that is why there is work and play.

2. That he is related to a spiritual as well as to a natural world, and that these are worlds of cause and effect.

3. That there is an inflowing divine life into human life, and only thru this does man live.

4. That thru impression and expression the human being comes to an awareness of these truths.

It seems to me that the whole of the scheme of education could be summed up in these principles. The right balance of work and play demonstrates them. The stage of growth and character of the child will determine whether he needs most the limitations of the idea of work, or more of the freedom that comes in play. We must not lose sight of the fact that the child is to be considered as a prime factor in his own education ; and each truth or experience, as it comes to him, must bear within itself that which appeals to his dual nature—his mind and his heart, his understanding and his will. No method which divorces this unity will ever succeed. If we have committed this fatal error, atonement can be made only by a thoro study of the child's affections, of his will, of his desires as well as of his rationality.

This is the great problem now before our psychologists. When we shall have solved this, then we shall know the relation of work and play to life.

WORK AND PLAY IN THE PRIMARY AND GRAMMAR GRADES

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I watched a young mocking bird on its first descent from the nest. It repeatedly stretched its wings and fanned the air, then hopped briskly for some yards. This it continued for some time, until, wearied with the exertion, it sought the low branches of a shrub, where it sat resting and being fed by the mother bird. A dog, after a long hunt, spends the rest of the day in sleeping off his fatigue. After reading steadily for some time, the boy throws down his book and has a romp with his brother or a run with his dog. The young business-man leaves his office after a hard day's work, and seeks recreation in a social evening with friends. Thru all

nature runs the rhythmic arsis and thesis of rest and recuperation, work and play, each setting off the other, each necessary to the other. Even the plants leave, blossom, and make fruit, then lie dormant until the season for fruit-making recurs. This rhythmic balance is natural to physical and mental life, and if the play in either is thwarted or unduly emphasized, the harmony will be destroyed and the result will be physical or mental weakness, perhaps deformity.

The child trainer, then, must yield to this natural law and take it into account in the development of her pupils; by a careful study of each child to determine (1) the kinds of work and play necessary to his growth; (2) the amount of work and play to which he has been accustomed; (3) when and where to make him work, make him play, allow work, and allow play. Each individual must be treated according to his needs. The farmer's lad of nine, whose life has been one of labor, and whose almost only companions are hard-worked parents; who makes mature comments on the animals in *Aesop's Fables*, but in whose mind *Mother Goose* awakes no glimmer of response, needs much tactful coercion in the matter of play. Quite different the treatment of the street urchin in the same class, who has played games of all kinds and whose mind revolts from the drudgery of learning to read. These, however, are extremes. The average very young child makes no conscious effort for growth. Most of his physical and mental expansion is thru the medium of spontaneous play. In the kindergarten this natural spontaneous play spirit is made use of in the training of the child. On entering the primary school he must learn to work with a conscious effort after thought-getting. Frequent periods of recuperation are necessary, and it is often possible to introduce the play element into his work, as the work element was brought into his play while in the kindergarten. Above the primary grades, where the work requires more application and time, the play is represented by such employment as gives æsthetic pleasure, as well as by the recess period of physical relaxation.

As a child advances in years he becomes taller, and by reason of constant employment attains to quite a "lump of muscle." He stores up for himself knowledge which he can call his own, which he can use as he pleases. There are words, dates, facts — his to keep. All this is the result of his work; but not the only result. The very use of the muscles makes them more powerful and capable of doing harder things after each effort. Every effort, also, of the mind makes it more powerful and capable of more difficult performances. This power is one of the chief results of work. No one, however hard he may work, can develop muscle or faculty power for another. Each must do his own work. Work, then, makes for the cultivation of the individual life. Play is the balance. In it we want companions. We learn to know others, to see their weaknesses, appreciate their suffering, admire their strength, and emulate their example. We

enjoy intercourse with them, and in turn strive to make ourselves agreeable to them. The individual is merged into the social being, and we have gained in sympathy and social adaptiveness.

Some work is a necessity. The physical man needs sustenance, and food must be obtained or the body will die. The intellect, as well, weakens if it does not have its proper food and exercise. He who lives must work; he who grows physically and intellectually must work. In the same way there is a strenuous "must" phase of play. After work recuperation is a necessity, or body and mind are soon incapable of further work. So this phase of play—eating, resting, sleeping—is just as essential as food-getting, and a neglect of either would result in deterioration, and ultimately in the extinction of the individual and so of the race.

But all of life is not made up of the strenuous "must." When the problem of the means of existence has been solved, the mind and body have acquired a habit of work and play so that the exercise of each is a pleasure—*i.e.* gratifying, purifying, and enlarging of individual tastes and inclinations. One's work, for instance, may be along the lines of scientific research, and play the gratification of the æsthetic nature. In this state, instead of working and playing to preserve life from extinction, the individual lives for the satisfying pleasure given by his work and play. He stands out among his fellows as unique. He works to make the work of others as easy as may be, and in his play he becomes able to express for himself and others what lack of skill and of cultivation makes it impossible for those others to express. The necessary work and play, then, tend to the preservation of life, and the expressive work and play make for individuality and talent.

The very young child is little more than an animal, and his actions are merely instinctive. Little by little his mind awakens with the growth of his body, and he gradually learns to know, recognize, and judge of his environments. Most of his knowledge, as before stated, is gained thru the play instinct, and thru this medium he can best be trained. Instinct has already taught him the necessity of nourishment, and in his games he gains the necessary exercise. He is at first a law unto himself, self-centered; not recognizing the rights of others. Thru games his social nature must be developed.

The organized game of the kindergarten teaches him to recognize the rights of others, sympathy with them and for the dumb animals, and the necessity of law and order. When he has learned these things, his games are a pure delight. He plays because he can do it well, because he loves it and his companions, and the first required play has become the more æsthetic expressive play. Now is the time to develop his individual mind—to teach him to work. Along with and thru this spontaneous play he may be taught to reason and to make research for himself; to discern and admire in others high characteristics, and wish to emulate

them. At this stage the thoughtful teacher will at first divide her attention equally between the play and work, and hereafter gradually emphasize the work until the child's developed mind recognizes that he must work or he will sink into the desuetude abhorrent to awakened thought. The strenuous work, the expressive work, and the strenuous and the expressive play continue as elements in man's life until the day of his death, but the logical order of their emphasis in the development of the child seems to be in this wise: essential play, expressive play, expressive work, essential work.

It is not only necessary for the child trainer to recognize the existence of these elements and the order in which they must receive the predominance of attention, but he must also recognize that they are ever present, and the neglect of one may retard the proper growth of mind and body. For instance, at the time when a habit of work is being formed, it is indispensable that exercise, nourishment, and rest should be taken at regular times of necessary lengths. If this is neglected, the body becomes sickly and the mind is worn out from overwork. Conversely, if during the age when the observance of exercise, rest, games, etc., is most necessary, some individual mental work is not required, the result will be a sickly mind and an overdeveloped animalism. So it is seen that a proper distribution of work and play is indispensable to the best hygienic development of mind and body.

Such are the problems with which every teacher is met. Some children have had a certain kind of training, others another. Each one calls for a different sort of management, and must be assigned a course of study which will strengthen his weaknesses and tend to his natural growth. Here is a child, spontaneous, simple, sincere, it may be, but whose animal spirits are as yet ungoverned; he needs much help in solving problems which require consecutive reasoning, and he lacks the ability to use what knowledge he has. Such a child has evidently learned much of the "law of the jungle" in his play — has had his social side well developed. He needs predominantly to form habits, to be taught to work. He wants the reasoning power which a knowledge of number gives; the proper use of words in language; the study in stories of incidents and lives as a unit, showing cause and effect; a study of nature and the results of breaking her laws. The work given this child must be the primary studies in number, reading, language; relations of things in size, direction, and distance; deeds of great men; many maxims and memory gems. Much of the work of this department, especially of the first year, is expressive work nearly akin to play; and the little conscious work demands recreation in singing, physical culture, class recitations, as well as the care-free play period. There are other children evincing the same traits in varying degrees of strength. These belong to the same department. Their knowledge and faculty power, in relation to the amount of recuperation

needed, must determine the extent to which these primary studies may be taught—in other words, determine the grade. These years of primary work are essentially habit-forming years.

Another boy presents himself who has attained to good habits of study and other things to be learned in what we have termed the primary grades. But he can reason only in the simple relations of numbers; a study of arithmetic will help this. He needs to know the problems of life and character, so we give him a knowledge of typical people in history and literature. He wants a working knowledge of his own language—grammar. He must study more closely cause and effect—the influence of the environments and racial peculiarities of men—which a knowledge of geography will supply. This is the age in which habit becomes conscious duty, and work begins to take on the aspect of the necessary. The play feature is by no means excluded in this gradation. The artistic in music, literature, drawing, etc., is becoming a delight to the student. In organized games—baseball, basket-ball, class drills, etc.—he finds vent for his natural animal spirits and learns how to organize, to lead, to live in both unison and friendly competition with his fellows.

The grading, therefore, of a pupil will depend on the work which he has done and is able to do in relation to the amount of play necessary. In the first year of the primary school, work should hold sway about equally with play. During each succeeding year, work should become a more conscious effort, with a gradually growing distinctness of separation from the play, until in the grammar grades the strenuous work finds its true and dominant place.

Upon the work and play instincts depend not only the course of study and gradation of the pupil, but the success or otherwise of the methods of a teacher. In the primary grades, for instance, language and reading may be taught in social conversational style. This is one reason why I prefer the sentence and word methods in teaching reading to the old alphabetic method, which necessitates too much of the unimaginative "must work," inadvisable, in my opinion, at this stage. In number lessons the objective method puts objects, by which the children are to learn relations of numbers, into their hands almost as if they were toys, and the practical application of the use of numbers is made in examples which cultivate the imagination as well as the reasoning powers. The work and play aspect gives also an argument for the predominance of concrete number work during the first two years of primary work.

In the grammar grades the mind recognizes work as work, and the teacher of modern methods leads her pupils to make their own rules in arithmetic. In history they must not only memorize facts, but be made to see the relation of an event to preceding ones, to read the signs of present times, and to prophesy of the future. In literature they are led by the teacher to make character analysis and criticism, and (in this is

the expressive play evinced) to take pleasure in finding ethical beauty and following moral purpose.

An original teacher is one who appreciates the proper relations of work and play, and is quick in adapting herself to them. Many are her devices, all born of this appreciation. Here is such a teacher of primary work. Her class has just completed a short, brisk lesson in numbers and is mentally tired. In another moment nature will assert itself in a wriggle, mayhap in a fisticuff. Before this can happen she makes use of the instinct of recuperation and calls for a song or some physical exercise. The next lesson is one in phonics. She writes a letter on the board—say *f*—and catches the attention of the class by likening the sound it represents to that of an engine letting off steam. In delight they make the sound and are easily taught the position of the vocal organs. After a recess period her children come into the room with excited animal spirits running high. They are soon quieted by the telling of a story which must be reproduced. So every instinct is directed into proper channels, every irregularity anticipated and provided against, and the result is a well-disciplined class. The same principle holds true in the management of the older children. Play and work indulged in along the lines of law and order, each in its proper place, time, and duration, result in good discipline. Again, in many cases, if a child inclined to be unruly finds his teacher can play well, he is often willing to submit to his authority in the matter of work.

There came once into one of my classes a girl who was restless, meddlesome, inclined to think me a natural enemy. I invited her to a spin on our wheels, we exchanged duplicate foreign stamps, and played tennis together. Gradually she felt my interest in her and respected it. I now think of her as one of the best pupils I ever had.

A high-toned young Harvard graduate accepted a position as teacher in a school in which I taught. He was well made, but small, and some of the larger boys who had won the epithet of "bad fellows" were inclined to regard him with contempt. Soon he had organized his class into a baseball club and was training them to play according to the methods of the Harvard diamonds. Before the end of the year the "tone" of his class was unimpeachable and his pupils as good workers (and players too) as any in the school.

Thus I contend that the proper relation of "work and play" in determining course of study, gradation, method, device, and discipline is an all-important question; a question the correct solution of which will make for the highest development of manhood in our pupils.

WORK AND PLAY IN YOUTH

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Crabbed age and youth cannot live together ;
Youth is full of pleasance, age is full of care ;
Youth like summer morn, age like winter weather ;
Youth like summer brave, age like winter bare.
Youth is full of sport, age's breath is short ;
Youth is nimble, age is lame ;
Youth is hot and bold, age is weak and cold ;
Youth is wild, and age is tame.

— Coleridge.

I'll serve his youth, for youth must have his course ;
For being restrained it makes him ten times worse,
His pride, his riot, all that may be named
By times recalled, and his madness tamed.

— Shakespeare.

People have always felt that some of the manifestations of young blood were hostile to the best life in society. "The imagination of man's heart is evil from his youth," say the Scriptures. Job defends himself against his accusers, protesting that they make him possess the iniquities of his youth, which he has long outgrown ; while David offers a prayer to his Creator, imploring him not to remember the sins of his youth, nor his transgressions. And men have sought by one means or another to repress these excesses and madnesses of adolescence. They have said that hot passion must be bridled, that the exuberant egoism of the boy just coming to feel the independence and power of manhood must be checked down on all sides ; the wild colt must early be broken to the harness of life. These persons have counseled a strenuous life for the adolescent ; it is good for one to bear the yoke in his youth, they say ; for there is virtue in honest combat with the difficulties of the world, since mental and moral muscle can be nurtured only by conflict. But from another side we receive advice of a different sort. We are told that the impulses of youth must be indulged and not suppressed ; that they are essential to a full, round character ; that each urgent instinct, if permitted to run its course, will contribute to the completed structure of the human soul. If we should follow these last voices, we would serve instead of compel youth ; we would allow girls and boys to speed out along the lines of least resistance ; we would expect them to expend their energies largely in play, in a certain sense.

Shakespeare would be patient with the pride and riot of the adolescent, but the great poet nevertheless realizes that ultimately the madness of youth must be tamed. The intemperance, the egoism, the bravado of young blood must be brought into correspondence with the requirements

of community life as it exists here and now. Activity must be drawn off from profitless, and sometimes even harmful, enterprises and turned into productive channels. Undue self-exaltation, the vanities of looks and possessions, the pride of purse or of intellect, must be tempered by consideration for the feelings and claims of others, and an appreciation of their worth. Passion must be bridled and subdued that it may not lead its possessor athwart the laws of health or morality. And in many another way the deep-seated, instinctive activities of adolescence must be inhibited, or, at least, modeled into conformity to the requirements of adaptation to a complex altruistic, ethical, and social order. And how may this inhibition be best brought about? How can pride and madness be tamed? By direct repression? Or is it a matter of guiding the forces of life, depending upon it that, if we employ them all at certain points of our own choosing, there will be nothing left to operate at other points against our wishes?

Now, we must inquire of the neurologist what he has to say regarding the *modus operandi* of inhibiting activities; and when we do, receive the answer that an action may be checked in its progress by putting against it one of an opposite character, and of its strength; or it may be inhibited by using in other ways the energies which would be required to produce and sustain the action. The neurologist would lay chief emphasis upon this last mode of inhibition, especially in the immature brain, where organization is still imperfect, where the checking system is still inoperative for a great variety of actions. Now, the great racial traits bequeathed to the child as instincts constitute the routes which the adolescent may pursue with greatest facility and pleasure; as a result of unnumbered ages of traffic these old ancestral thoroughfares have been made easy and comfortable to the modern traveler, and so he is but too apt to choose them beyond all other courses for his journeying.

But this sounds pessimistic. If the fate of every young voyager has been determined by the practices of his ancestors, what can we do about it? The adolescent will live out his instincts, and we cannot stop him, do what we may. Yet hold a bit: there is a way of throttling instinctive actions that alienate the adolescent from the world about him. We can bring to bear upon him, with tremendous force, stimulations which meet with responses that absorb the whole of his life; stimulations emanating from impressive, commanding personalities with whom he comes in contact; stimulations from biography, from history, from literature, from science, from his games and plays, and all the rest that is good and elevating. These reactions will drain off the forces of the organism, will monopolize the thought, and leave nothing for the support of conduct antithetic to the environment which is acting upon the individual.

This doctrine of inhibition is seen in its outward effects in all the phenomena of daily life. One who observes the activities of the young

sees how behavior is determined absolutely in view of this principle of the expression of energy at one point and its withdrawal from other points. How quickly a child's conflicts with his companions, or his assault upon household finery, or anything of the sort, is abandoned when there is made to play upon him some strong stimulus which incites activities of a different character, as when a game is organized for him, or he is given tools to work with, or he is invited to go to the circus, or he is furnished with an attractive book to read! The world beats in upon the child, and that which makes the strongest impression, depending upon its significance for him as determined by the qualities of objects themselves, and by his whole previous experience with them, or something like them—the strongest impressions win the child's recognition and determine his conduct.

Again, the principle under consideration is seen in the case of sickness, where the organism is depleted of its energies and few activities of any sort occur. Even profound and instinctive actions, which in fair weather urge their possessor on to action, now have no force. There is no energy to set a-going and to support such action. But as the sick one returns to health, as the ravages of disease are repaired and there is something over and above what is necessary for the support of vital function, then the old accustomed reactions begin to reappear, and in time return with all their original force, provided that in the interim some new interests have not gained a foothold.

And this brings us more particularly to the problems of play and work in adolescence. When a boy's energies find an outlet thru those channels worn deep from the ceaseless treading of the race; when he does the thing that humanity before him has done for a practically limitless reach of time, whether this produces immediately valuable results or not, then he plays. These old racial activities constitute the lines of least resistance for the individual; there is no opposition, no impediment, no opening up of new highways. But in work there are barriers to be broken down, new pathways to be blazed forth, unpracticed activities to be learned. The boy responds subconsciously to the old enticements, and there is of necessity a struggle in doing the new thing when the old seems so much easier. Thus play affords for the adolescent, or for anyone else, the highest degree of pleasure, since the whole being becomes engaged in it without reserve and without compulsion. There is no division of personality in such a situation, no tension between motives, no long weighing of considerations; the whole life is given up in harmonious unity to the doing of the thing which is felt as play. But in work enterprises foreign to the one in hand make a constant appeal for the attention and devotion of the worker; the boy pores over his geometry, and a small voice within him whispers of football, of skating, of the ball-room, of the billiard table; and it gains an audience

it secures some response—enough, at any rate, to set up a struggle in the soul, which gives a consciousness of effort for the student in holding himself to his task.

Now, if one purpose in the treatment of youth be the direction of the superabundant forces of young life into channels of social and moral action, of usefulness and frankness and diligence and courteous demeanor and courageous action—if this be our leading purpose, can we attain it best by engaging the adolescent mainly in play or mainly in work? Shall we seek to beget conduct of the right sort by soliciting from our pupil reactions that enlist his whole being, and that to him have all the joys of play; or shall we, for the sake of cultivating a vigorous, stalwart character, one that will regard with equal stoicism both drudgery and happiness in the affairs of daily life, deliberately bring the boy and girl face to face with situations which must be dealt with in a stern and serious and painful manner, and which are not of themselves in accord with the child's interests and spontaneity? Perhaps we may receive help in our difficulty if we take counsel of the great masters who have been students of child nature, and who have reflected long and earnestly upon the best manner of teaching the young idea how to shoot. If we question Aristotle, Quintilian, Montaigne, Rousseau, Locke, Spencer, and all the rest, we shall receive but one sort of answer, namely, that the best success is attained when thru the child's play we guide and direct him until he has arrived at the estate of manhood. Play, says the modern scientist, organizes and solidifies personality in the most efficient way, since it commands all the powers and faculties of the mind in its prosecution. What the child can play at will attract him, and so will exert a profounder influence upon him than if it was forbidding to him. "Little profit grows where no interest is ta'en," says Shakespeare, and both psychology and experience indorse the proposition.

But what of work? Shall the adolescent do nothing but that which engages him in a pleasurable way? Shall he not be made to struggle with difficulties, to put aside the blandishments that lure him from the tasks that must be performed if he is to realize the most in his life? The solution of the problem will seem the easier when we consider that much that is of profit to one in the present age of the world is of recent origin in the race, and it has not yet become established so deeply that it is inherited by the young as instinct, thus constituting an easy way for energy to express itself. Much of what a youth must learn if he is to become adapted to the world about him, the world of men and things alike, is new and difficult. Life is certainly more complex today than it was when the race was at the starting-point. The crude, instinctive actions which served well enough when things were simple, are now wholly inadequate to successful living, and in some instances are hostile to the best success in life. The race is ever growing more altruistic, and

the scope of individual action must grow more restricted, in a certain sense—in the sense that purely selfish deeds which characterize the early years of life must be more and more inhibited; the boy must observe the golden rule today more fully than his ancestors did. The sphere of knowledge is widening every day, and the adaptations to the world which this gives is growing more complex and intricate, but at the same time more perfect and desirable.

And these higher phases of life must be mastered by effort; youth must work, if maturity is to be happiest and most successful. Play gives mastery of only the simplest processes of living; the fundamental requisites are certainly gained in this way, but everything finer and more subtle and complicated comes only by diligent application, and that not voluntary or spontaneous, at the start at any rate. Growth in the higher reaches is secured only by struggle; the tendency is to stop on a lower plane of development, where the fundamental instinctive activities suffice to keep body and soul together, and there must be constant pressure brought to bear upon the learner of life's ways to get him to ascend to the point which the race has reached in social, intellectual, ethical, and even physical living. The boy will not, undirected, unaided, and unforced, equip himself for the duties and privileges of life in civilized society by making his own the insight and power and skill and control which history and literature and science and mathematics give; other and simpler things will appeal to him too immediately and seductively.

And what, then, is the doctrine? Youth climbs the mountain of life most naturally and in a sense most effectively by play, but the topmost point can be reached only by work. What is the golden mean? There is seen to be a harmonizing principle, when it is recognized that work becomes most effective when one has an end in view to attain by his efforts. If there is nothing but a blank wall ahead of him, his life will be miserable indeed. Work must always have a clear goal toward which it tends, and this must be worth reaching. Mere drudgery for the sake of discipline alone disintegrates personality, kills initiation and spontaneity; the activities it produces are always the results of force imposed from without. Drudgery which is not tributary to some useful end does not stir the inner life to noble deeds, it does not result in that organization of the being where all works together in harmony. And youth is the time of all others when things that receive any consideration must have a life-relation; they must help to solve some of the problems that confront a mind opening up rapidly to the meaning and responsibilities of existence—problems of a social, an ethical, an intellectual, and a physical character. Anything which promises to be a guide to youth thru the unknown country which it is to enter will be mastered, no matter what effort is required to attain it. And herein lies the possibility of making work effective, of leading the adolescent boy and girl to apply

themselves to tasks that are hard and in themselves uninteresting and unattractive; but they lead somewhere, that's what makes them tolerable. If the literature and history of the high school are made to illumine the dark places of the pupil's everyday life; if the geometry gives his mind poise and stability in the midst of phenomena which would otherwise be distracting and unsettling; if the physics be made to interpret the real world of forces acting in the pupil's environment; if grammar be made wholly tributary to the right use of language in the everyday needs of the student; in short, if the school leads the student to see the *significance* of the work that must be done, that *must* be done for successful living, then it loses its aspect of drudgery, and the pupil will put forth his strength upon it, as he does so freely expend himself upon his baseball, upon his billiards, upon his novels, and upon other things which touch his life. One need have no fears in saying that a youth cannot be led into participation in the highest life of the race without tremendous effort on his part; modern life is altogether too complex, too involved, to be mastered in a free and easy way. The youth who will not strain himself, who will not gird up his loins to do battle with ignorance, will forever forfeit the happiness which comes from a broad, deep knowledge of the world, and a consciousness of a mastery over it. But the end of effort must always be the comprehension and conquest of one's self and the world to which he is related, and the youth must be made to see his progress toward this end in his work, when all the powers of his being will become co-ordinated in the effort to attain it.

DISCUSSION

PRESIDENT G. STANLEY HALL, Clark University, Worcester, Mass.—The papers just read are both open to discussion, but before throwing the whole topic open either for question or debate, I should like to take the liberty of saying a few words with regard to play and work and one or two of the problems that are involved. These papers are so admirable, and have covered the chief practical points so well, that on points on which they specialize there is very little that needs to be said. But there are other aspects of this very vast subject, as everyone knows, and best of all the readers of the papers, that may perhaps be worth some moments of attention. It is to these things that I should like to invite your attention briefly.

In the first place, as you know, within the last few years there has been a vast amount of discussion as to what play really is and means, and just at present most of us in the psychological field are rather dominated by the theory of a German writer named Grosse, who has written two books—one on play and work of animals, and one on play and work of men—which are based upon the theory that all kinds of play are anticipatory industries of later years. That was a very important contribution, and there is a great deal that sustains it; but I think the view is very generally gaining ground that it is inadequate, and is not sufficient as a basis for educational work. Play is much more than this. A great deal of play might be defined as just exactly what this is not. It is doing things that never will be of any kind of practical use in the world. Play for the body is

something like the imagination for the mind. No one would attempt to say that fancy, in all its multifarious forms, is getting ready to think severely. So I think it is but a partial view that play is simply fore-activities that later will become work.

Play is really universalizing — Froebel understood that. The child does everything by play, and the real object of a good deal of play is not anticipatory of work. We have a long list of plays which we cannot explain in any other wise than as the necessary activity of rudimentary organs of the mind and body. What are the rudimentary organs, so called? They are organs both of mind and body, that pass away or disappear, that are absorbed before maturity is attained; hence, of course, the activity of these cannot be anticipatory of work. But it is very important to exercise these rudimentary organs and functions.

Children have to live over, in a great many respects, the activities of the race, as everyone knows. They have to be *in petto* savages and fetich-worshippers, and that sort of thing, and it is necessary that these rudimentary organs, which are going to vanish out of sight, some of which are to be subordinated by the development of higher organs, shall be exercised. It is a very curious thing that the vermiform appendix and certain muscles of the body—for instance, certain points about the hips—have to be exercised at certain periods that they may vanish; and if they are not exercised at such periods, they do not vanish when the proper time comes, but they remain as pensioners, as they may be termed, on the body.

In the case of rudimentary organs, use means disappearance. It tends to make them vanish, and it is therefore very necessary, as a part of nature's economy in cleaning house, so to speak—in getting rid of superfluities. This is just as true of the mind as it is of the body. If there were time, I think I could convince the most reluctant that children need to lie, and that they need to practice certain things which, if adults did them, would be criminal. If they are not allowed to do these things when they are babies or children, when these activities are not criminal, then they do not reduce these rudimentary organs, and they grow, and the criminality or vice, or whatever it may be, is liable to break out in later years. Hence the functions of some things which we rather too strict pedagogs call vice and crime are, some of them, most beneficial, and we need to give childhood large latitude in both what it does and thinks and feels, in order that we shall clear the soul of the debris of the past stage of evolution and make a platform for the development of humanity; that we may lay the basis strong and deep.

If the child does not have a chance to give vent to these faculties at the time when they are plastic and can be vanquished, then they are liable to grow with the child's growth, and we find abnormalities creeping out in a few years.

This is a function of play which Mr. Grosse and his school have not recognized, but it is so well established that it has become almost a commonplace with those who have given the subject attention. This does not mean, to anyone who happens to be hot for controversy, that we shall put the children thru a course of vice, thru a course of barbarism, or thru a course of immorality, in order to cleanse and purgate their souls; but it is simply the development of the good Aristotelian doctrine that, if a man goes to a theater and sees a man choking another, he goes home from the theater less likely to choke a man himself; that, if he saw vice on the stage, it unloaded the tendency to vice in himself. That theory has not quite developed itself, and it is an extreme theory of æsthetic or dramatic art; but without doubt there is some truth in it.

When the judgments can be pre-formed by stories in childhood, they seem in later years as something they have imagined or dreamed; so, when we control the fancy of the child, we are laying down paths over which conduct is to run its main traffic in later years. That is the doctrine and the theory of play.

There should be a great deal of latitude and liberty, and a good deal of diminution of our severity, in judging the conduct of children. We forget that their souls and bodies come into the world freighted with the promise of all that is best, and also freighted with

a great deal of what is worst, in the world ; that their bodies and minds send their roots deep down into the animal kingdom, and that we have not a single organ of our body or a single cell that we have not inherited from an animal ancestry; and that is, to some extent, true at least of some of the basal qualities of the soul's instincts and feelings. Hence one of the functions of play is to vent all these bad activities and to do in play form what constituted the lives of savages, and, if you want to be evolutionists, the lives of animals. It is necessary to exercise these things, so that the organs which they represent may be reduced, because these lower activities call into action higher powers that reduce them. That is the way it works. So that sometimes it is a good thing for a child to rouse its conscience thru some such exercise, and later they are much less likely to do that same thing again.

Of course, we must not apply our adult standards of morality to little children. Let them be wild. Let them play, with their lies of fancy and imagination. The soul is larger than a fact; the soul needs to be the instigator of all faculties and the seat of all dreams. Childhood will have its rights in spite of us pedagogs; and it is a good thing. It is necessary, in order to relieve that hunger for something that is larger. If you don't give them the gracious lies of poetry, with perhaps a great deal of imagination in it, they will make them. That is the play of the mind.

Another of the recent lines of investigation, which I think has been very fruitful, has been directed toward the laws of fatigue, as you all know. We have had everywhere studies of fatigue. How long is the normal period of study for this child? For what age? How does it affect blood pressure? How does it affect sleep? How does it affect reaction? And so on.

If you set children at work when they are fatigued, you are cultivating, not scholarship, but nervousness, and that is an awful thing. The American nerves are in danger. The American child is the most nervous child in the world. According to the child studies that have been made, it has more automatism than any other child. It is more easily upset; its mind is quick, alert, and it matures younger than most children. The American child is liable to get on its nerves; cannot stop play; cannot go to sleep readily; jumps and twitches when it does go to sleep. That is a product of fatigue. If we could only find a way of getting children for work when their minds are in their best condition, we should get results much superior to what we do get. The mind which is really fresh can do several fold more work than the mind which is fatigued. That is why refreshment is good when given in the kindergarten, as it is in some. The practice which prevails in some of the kindergartens of allowing naps in the middle of the day is good. It is one way of systematically restoring and saving the child from one of the great enemies of the human race — fatigue.

The trouble with work in the schools is that it brings on fatigue, which tends not only to neurasthenia, but to degeneration and arrest, and that is something that the little girl is very much more prone to than the little boy. It is a very impressive and significant fact that the female organism has the power to draw upon its reserves much more readily than the male organism. That is true of the body and of the mind. It is very much easier for a woman to overdo and not know it; very much easier to draw upon those reserves which are meant by nature to go to posterity, or to future life, or to longevity — to draw upon them and not know it; and when the crises come incidental to motherhood, change of life, and old age, then these troubles come back. That is a thing we need to bear in mind: the trouble with work is that it means worry. Work is all right. You can do a great amount of work, just so long as you keep well nourished and sleep, and keep from anxiety; but the anxious child, the hard-worked child, the child that has to do too much, is in danger. We see it in athletics. There is, indeed, a great danger that boys who train in college will draw upon their vital organism, so that, if there is any trouble of the heart or lungs, the athlete is the one who breaks down. The easy-living one does not.

I did not mean to take the time of the convention to talk at length about these vast themes; my intention was simply to introduce the speakers and to invite discussion upon all the papers.

A MEMBER.—What about habit in the instance to which you referred of the child that lied?

DR. HALL.—The age of habit really has not dawned yet. It is to come later. The period of habituation is really from about eight or nine to twelve; those four years are specially sacred to the formation of habits and automatism.

MRS. PUTNAM.—Would you curtail that lying—I don't like to call it that exactly—but that extravagance?

DR. HALL.—I think curtailment should come very early in life, and should be gradually introduced as the mind expands.

A MEMBER.—Would you make a distinction between the lie of the imagination and the lie to escape punishment for wrong-doing?

DR. HALL.—Yes, indeed. I am very glad you asked that question. Of course, the lies of the imagination are, as Plato called them, "gracious lies;" the lies that make poetry, which are lies only to gradgrinds, that want facts, only facts. But the meanest and most censurable lies are lies which are told to escape the natural consequences of acts. Those are a totally different thing, and it is unfortunate they have the same name. I think psychologists make several classes of lies—the natural lie, the lie of the imagination, the generous lie, etc.

MRS. PUTNAM.—Why can't you give them another name?

DR. HALL.—I think we can. It is a question of the dictionary, perhaps of inventing a Greek word, but people don't like new words as a rule.

A MEMBER.—You say that by using these organs which eventually disappear, or are intended to disappear, higher organs will develop. Now, suppose that activity promotes the growth of these lower organs, and the higher organs do not develop, will not those organs retain their life?

DR. HALL.—No.

A MEMBER.—The only organ you mentioned is the vermiform appendix. I presume that that does remain. Now, would it not remain in the case of activity, if something higher in the organism did not develop to serve the purpose for which that was originally intended, in the lower life?

DR. HALL.—No, it would not. I am reluctant to use my old illustration, because I have used it so often, of the tadpole's tail. We know that the tadpole is going to become a frog. It is born in the water and it is going to live on land very largely. Suppose we say: "We won't have this low species of mere fish life." Suppose some pedagog of pollywogs should come in and say: "We will shorten this line, we will cut off the tail; or else we won't let them use the tail, so that it won't grow. Therefore we will straighten the way for the growth of the pollywog." But if the tail did not grow, if it was not exercised, the result would be that the legs would not grow, and the animal would have no means of locomotion at all. Some people think that a tadpole's tail falls off. There never was a tail that fell off. It is absorbed. It has to be developed in order that you may have the legs later. Again, take the gill slits. All of us have gill slits some months before birth. Some have gill slits at birth; in many cases of deformity they are seen. They are indubitable signs of the aquatic origin of life. As the embryo develops, this particular gill slit is twisted around and makes two of the muscles of the eye. One of them is transformed slowly, develops, and becomes the principal part of the fauces, makes the vocal cords, and makes a part of the larynx, which is used in swallowing. Another is twisted around and makes the Eustachian tubes. Another one does not disappear, and makes the thyroid glands, whose use we do not know. Suppose you could eliminate the gill slits. You would eliminate those higher organs which grow out of them. That is

what I mean by the transformation which is stimulated by use. Use makes these higher organs develop out of the lower.

A MEMBER.—I want to ask another question. You say, where exercise has not been given to those lower organs, that there is necessarily stunted growth in the higher organs developed from those lower organs. You were speaking of the mind, weren't you, and not of the physical nature?

DR. HALL.—Both.

THE MEMBER.—You declare it as a principle that where there has been a stunted growth of the lower organism there must be a corresponding deformity or stunted growth of the higher organs on which these are based.

DR. HALL.—That is it exactly. What would happen if the higher organ was developed excessively and the lower stunted, if such a thing could be? You would have, in that case, the precocious Christian that John Stuart Mill describes. He says it is a bad thing for children to get converted too early; that is, at seven or eight years of age. And he goes on to say, in the well-known, oft-quoted phrase, which you have no doubt heard, that children who are pious early are very much like early risers—very good in the forenoon of life, and very stupid and dull in the afternoon. There is a certain season when nature seems to have decreed that religion should begin its great and sacred work of transformation, which is the most important thing in the world. It seems to belong in a certain period of growth. It cannot come too early; it cannot come too late. There is a nascent period where it belongs, and the conversion curves rise up at sixteen or seventeen, and then fall much lower. All the confirmation ceremonies in all the churches in all denominations throuth the world—Greek, Catholic, Jew—are just then. That is the special period. If it is earlier, the danger is it will be a kind of vaccination. You will have the "chicken-pox" form of religion, and not the true thing.

A MEMBER.—I believe there are current theories with regard to the laws of biology, that the use of an organ develops it. Now, how can you reconcile that idea with the notion that the use of the pollywog's tail eliminates it? Don't we have to say that the pollywog's tail disappears because the energy goes to the working of some other parts of the organism, and does not disappear because it is exercised, but that there is development because it comes into action, and that the working of the tail has nothing to do with the disappearance of the tail?

DR. HALL.—I thought I stated—I stated it as clearly as I could—that this is absolutely an exception to the general law, the Lamarckian law of use and disuse. You are quite correct, as you know, in stating the general theory of Lamarck, which every biologist holds, that, in general, use strengthens and disuse weakens. But in the use of the rudimentary organs, after they have reached their acme of development, this law is reversed. To ask why is to ask why the sun does not rise in the west. It is just as universal a law as the Lamarckian law. When the rudimentary has reached its maximum, the more you use it, the faster it degenerates. Take the case of some physical diseases, as consumption: at a certain stage the general use of the lungs hastens the decomposition of tissue. We see it, too, in many forms of degeneration and disease. Excessive use when the organ is on the way down accelerates the process of deterioration; that is one of the great laws of the world.

MRS. PUTNAM.—To return to our theme, I think the children's work in the kindergarten comes from the things that they see about them. They see their mothers making bread and they want to make bread. Do you call that work or play?

DR. HALL.—I call that play.

MRS. PUTNAM.—I tried to make plain in my paper that there was not a distinction at the kindergarten age between work and play. They merge one into the other in such a way that I do not care to try to separate them; I do not know that I could if I wanted to.

A MEMBER.—I speak as a mother. I should like our boys and girls to be factors in

the home, part of the home. Ought not they to be made to feel that they are factors in the home and have their little tasks to do? If it is play, all the better; but if it is work, will it not make them better boys and girls? Just as father and mother work to make the home beautiful, ought not children to feel that they have something to do with that? If we can make it play, all right. But if we cannot, isn't it the mother's duty and the father's duty to see that those tasks are done, to make the boys better men and the girls better women?

DR. HALL.—That is it exactly. Just in proportion as the mother and father have ingenuity enough to make the children think their work is play, they are pedagogical, and they are doing the best possible work. But just as soon as they lack the wit and lack the pedagogical instinct to make the children think it is play, and they are reluctantly forced to do it, that is a different thing. With regard to the kindergarten, my point was this: it seems to me there is a little too much tendency to make the children overwork in doing a certain set of things, making products out of paper, something of that sort, when you have the whole world of play, which is infinitely larger than the Froebel's gifts, to draw from. I think we get more activity, more discipline, train the imagination better, help the soul, than if we try to transmute play into work.

MRS. PUTNAM.—Two weeks ago a mother of a boy came to me. She was a stranger, and she said: "I came to you to see if you could give me any help in regard to my boy. He is an absolute kleptomaniac; he has been stealing from the time he was three years old, and now he is beginning to do it consciously, and is beginning to cover his tracks. I felt it was something he would grow out of; I felt it was something I could indirectly meet; and I let him alone. Now he has got the habit. Now, what are you going to do?" I could not give her any help; but, if your rule holds good, he should go on stealing.

DR. HALL.—I think all these individual cases should be met precisely as a physician should meet a case of physical disease.

MRS. PUTNAM.—I told her to write to you and find out.

DR. HALL.—I get hundreds of letters from anxious mothers about cases of that kind. What shall I do? I say: I can't tell anything about it unless I can see your child. You would not think of writing to a doctor at a distance, probably, asking: "What medicine shall I give for this, that, and the other symptoms?" I know of a family in Boston that had a son who was a kleptomaniac. They thought the best thing to do was to let him steal and get punished for it, a week or some days, in prison. He did; and it proved to be a good thing for him. It might not be a good thing for another boy. You must use your best judgment, and not have a rule that you cannot bend to suit the individual.

PRESIDENT'S ADDRESS, KINDERGARTEN DEPARTMENT

MISS EVELYN HOLMES, DIRECTOR OF SOUTH CAROLINA KINDERGARTEN
TRAINING SCHOOL, CHARLESTON, S. C.

Since the early seventies the kindergarten has held a prominent place among the departments of the National Educational Association. Its influence cannot be estimated. From the pioneer days, when every inch of ground had to be fought over and won by dint of much speaking as well as doing; when its enemies were of its own household, namely, the educators of that day, who, succumbing one by one, as the force of the truth of Froebel's educational principles became clear to them, have happily become its exponents; from that far-away day to the present

time, the National Educational Association has stood as the strongest advocate for the kindergarten in this country.

Now that the first victory is won, and the kindergarten is accepted as a force in the early stages of education, it becomes the privilege and duty of kindergartners to see that the campaign is carried farther, even into all grade, college, and university work. Here at Detroit is the time for a clear understanding, a fuller sympathy, and a more definite purposing concerning the work which this department has before it in the coming years.

The uniting for this convention of the Departments of Child Study and Kindergarten was proposed by the presidents of these departments, seconded by the President and officers of the association and many prominent kindergartners, with the hope that it will prove a step toward a stronger bond of unity with all allied departments.

All kindergartners believe that the Froebelian principles of education are destined to permeate and influence greatly all branches and phases of education. This end, therefore, should always be in view and call for support and effort.

We are all members of a large national family, and, as members, presumably interested in each other's progress. A year ago this great body met at Charleston, and thus showed its strong interest and desire to help in the progress of education in the South.

We, who are struggling to uphold and advance the kindergarten cause in the South, so that it shall stand in its right relation to all education and shall be an energy itself in the forwarding and formative process, have cause to be grateful to the National Educational Association convention of 1900. Especially are thanks due to Madame Kraus-Boelté, the honored president, and to the other friends who came from long distances with helpful words and kindly suggestions. To these, and to all our friends gathered on this occasion, are addressed these words concerning the progress of the kindergarten movement in South Carolina.

On that occasion Professor P. P. Claxton, of Greensboro, gave an address on "The Needs of the Kindergarten in the South." He first referred to the need of the kindergarten in the South, that the parents might better understand the education of their children in all phases, and become awakened to a sense of their own duty in this respect. He next referred to the need of the kindergarten in the South, that parents, teachers, and school officers should better understand the connection between the school and the home life. He also spoke of the need of the kindergarten for "the millions of children of the dusky race whose home is among us," arguing that the kindergarten is the best type of school to bring about the transforming influences so much needed. And lastly he spoke thus:

But we need the kindergarten most especially for another reason. The southern states are rapidly becoming the home of the factory. Already the cotton factory is a

familiar sight in the Carolinas and Georgia. The country people are moving into the factory towns from their country homes, with their large families of children. Is it needful that I should depict for you this factory town and its life—the large brick factory building with its long rows of humming spindles and rattling looms, at which men, women, and children work twelve hours a day? I have seen boys and girls under ten • working thru the night, from six to six, drinking their cup of black coffee at midnight to keep them awake till dawn; the groups and rows of houses without beauty of architecture and with no relief of lawn, garden, or fruit trees; no public library; an ungraded public school, taught from three to eight months by an incompetent teacher, in a house unfit for such use, and only one-fourth of the children of school age in attendance. I welcome the cotton mill with every other form of industry that shall bring wealth and its power and possibilities to our people, but the blood of the children must not be woven into the web, dyeing it a crimson hue; nor must their cry continue to go up to the Father in whose sight the soul of one of these little ones is of more value than all the trade of the Philippines.

Let me give you an idea of how these needs are being met. Private kindergartens are springing up in many towns, and there is a consequent increase of interest among parents. A few public schools in small towns have aided the kindergarten. The principals of these schools are very progressive men, but the lack of public money hampers the work. Our State Normal School at Rock Hill has a fine kindergarten department. The standard there is high, and Miss Macfeat, the head of the department, is one of the foremost kindergartners of the South. This is destined in time to influence public work, and to bring about the adoption of the kindergarten in the larger cities. Also, for a number of years, the South Carolina Kindergarten Association, of Charleston, has carried on a large free kindergarten. This more nearly approaches the public-school kindergarten, so far as the class of children in attendance is concerned.

A number of the colored citizens of Charleston have organized a free kindergarten association, and are supporting a kindergarten with a little help from the city. This is a step in the right direction, and tho the only movement of its kind known to me, the growth of interest is very encouraging.

The greatest stride has been made in the line of the greatest need, and, thru the combined efforts of kindergarten associations and progressive and humane mill presidents and directors, kindergartens are starting up in the mill towns. The first mill kindergarten in South Carolina was organized a number of years ago in the vicinity of a cotton factory in Charleston, and was supported by the alumnae of the Kelly School, of that city. The factory has been discontinued, but the kindergarten still lives and flourishes. Two years ago the Kindergarten Association of Columbia established a summer kindergarten in connection with the Richland mills. In the fall of 1900 the mill towns of Pelzer and Greers entered upon an educational and economic experiment by adding the kindergarten to the mill grade schools, the mills bearing the whole

expense. These kindergartens have been watched with much interest and satisfaction, the work proving such a success that it will be continued this coming year under more advantageous conditions.

During the winter Rock Hill continued the good work. It was begun in an afternoon kindergarten supported by the King's Daughters at the Arcade mills. This effort has resulted in the organization, in June, 1901, of the Rock Hill Kindergarten Association, which in point of enthusiasm and numbers has probably made a beginning unequalled in the state. The aim of the association is to establish kindergartens for the mill children of Rock Hill. The mill officers are members of the association and have promised to aid generously in the work. The first kindergarten has already been opened and will continue thruout the year, the plan being to give a ten-months' session, the long vacation being in December and January. This division of time is an experiment to be watched with interest, and may prove acceptable in other places than the South.

Columbia, having been impressed with the good results of the summer kindergarten in the Richland mills, now comes to the front, its three mills, Richland, Olympia, and Granby, opening and assuming entire support of its kindergartens and placing them under the Kindergarten Association for superintendence and control, thus unifying and spreading the kindergarten interest thruout that city.

Thus within the year six mill kindergartens have been established. We know that other mill presidents are planning to follow in this line as soon as possible. Herein lies the hope of the kindergarten movement in South Carolina, and probably the same is true of North Carolina and Georgia as well.

Perhaps mill children are the same everywhere, but from my slight knowledge of the case I think that quite a different element enters into this work than is apparent in some of our northern cities where the population is mostly foreign. This has been referred to before in speaking of the immigration of mill people from country homes, and anyone familiar with the condition of the country in North and South Carolina can imagine the barrenness of the lives which have never been able to rise above the necessity of work for daily sustenance.

A few word-pictures, taken from the reports of the kindergartners of Pelzer and Greers, may show what I mean, and will prove that the kindergarten is to bring to these people the balance or rhythm in work and play:

No one who has not seen it can know the change that comes over a child's face in a few short weeks of kindergarten life. Those little old men and women lose the careworn expression. They drink in through song and story and talks impressions and ideals that find expression in their home free play, which in some cases sadly needs this purifying influence.

From timid little people not knowing whether to laugh or cry, sitting down in their chairs whenever told, or building with blocks, listening to the songs and stories with

little interest, in a mechanical manner, to the now noisy, happy, and contented kindergarten family, is a transition frequently seen.

The children show a marked improvement in their work and play, being more child-like, not the matter-of-fact little men and women I first met, without imagination or inventive power, laughing at the finger plays, also at my joining them in their games, and self-conscious of every movement they made.

Such happy little ones! Every morning, while waiting for the bell to ring, you can see nearly every child in the school—for the older ones play the games learned in kindergarten with the babies—skipping or dancing Looby Loo or singing "Little bird, you are welcome," and then running to meet their teachers as they appear in sight.

I can say that the work is very encouraging, because the kindergarten and the mothers, and also some of the fathers, co-operate in a common interest, visiting the kindergarten to see just what the children are doing and expressing regret that they can't stay longer; taking an interest in the meetings. Some of the fathers stay at home and care for the babies while the mothers attend their kindergarten meeting.

This sketch of South Carolina's growth, when compared with the rapid strides which have been made in some of our northern cities, seems almost unimportant, but it is the beginning, and as such has a right to a place in our interest and memory. As time and effort bring success to our work, we can then turn with certainty for appreciative encouragement and help, if need be, to the more favored sections of our country, remembering that we are one family, with one aim, namely, to give to each child its divine right to freedom and self-expression.

NECESSARY ELEMENTS IN WORK AND PLAY, AND SOME PRACTICAL CONSEQUENCES

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As our subject today is rhythm, I shall only attempt to discuss other necessary elements in work and play, such as activity, co-operation, and progression, where they relate to it. I shall speak briefly of how it underlies or governs activity, and then try to suggest a few practical possibilities.

Activity is, of course, the condition of all work and play; but activity, either of live or inanimate things, cannot be maintained under the same form without cessation. It must either be recurrent, intermittent, or must come to an end. If we want proofs of this recurrence and alternation of activity in all things, we have only to look at nature, to see in the seasons, in light and darkness, in tides and trade winds, and in many other natural manifestations of force, such changes as may be called rhythmic. Following, and sometimes growing out of, these come the changes in growth and decay, in birth and death, thruout plant and animal life, as heat stimulates them, and its excess or lack checks or wastes their forces again; and at last we come to observe regular change and orderly arrangement or balance, even in the forms of plants and living

creatures, and in the movements depending on form. From the expansion and contraction of protozoa up to the flying of birds, and the walking, running, or dancing of men, this is so common that we rarely think of it, except when some deformity, some lack of completeness in the form, breaks the rhythm and makes irregular movements instead.

Turning to the arts and productions of men: the cradle, the swing, the rocker, the bicycle, the sewing machine—everything, indeed, that has treadles; the steam engine, the printing press, the saw, the loom, even the rubbing of clothes on the washboard, have rhythmic movement and sound, and bear testimony to its necessity and naturalness, both in force and form. The form of our music and musical instruments, the sound and measure rhythms, and, still further, the contrast and comparison of ideas and the recurrent alternation of certain ideas in our poetry and literature, make us wonder whether the intellect, too, is not built upon a law of rhythm. And it would puzzle us to say exactly how much of this is natural and how much artificial; how much of it is because we like and choose it, and how much because it fits our natural ways of acting and physical make-up; how much because the balance of applied force and material acted upon can come out in no other way. Two interesting questions which were suggested as a basis for today's discussion are these: "Is there a necessary 'must, have to' element in both work and play, and also a spontaneous or 'may, want to' element?" "Should the 'may, want to' element predominate in the first years of childhood?"

Surely, the principle or law of rhythm in both form and force, if we took no other, proves that there is a "must, have to" or necessary element in both work and play, even if but the physical one. Any arm or leg movement, or even finger or tongue movement, must depend for its swiftness and strength partly upon the length and proportion of parts in the body, governing movement, as with a pendulum, and also upon the force and good condition of the vital organs, e. g., the regularity of movement of the heart and lungs, and must be subject with them to the alternation of activity, without which no movement can continue. Again, the rhythm or regular alternation of breaking-down and building-up processes in the body, while variable, does result from the fact that activity of any kind maintained for a certain time requires a certain amount of rest and sleep; that a certain quantity of waste of tissue and nerve material necessitates a certain amount of nutrition for its repair, even tho we are not yet sure of the exact measure of either.

The same story is told in another way when we consider education; for the one difficulty to which we are always trying to find the clue is the need of harmony between spontaneity and control, between personal rights and wishes and the good of the greatest number; or, in other words, the individual and the social whole. We have to find out how to balance taking in and giving out, doing what you choose or what you

do because of the pressure of others; in physiology and psychology we see it as the balance that is struck between heredity and environment, between what you as a human being possess, irrespective of your surroundings, and what you get from them—what you absorb and are nourished upon, whether physical or psychical. Each child possesses from species, from race, from sex, from ancestral inheritance, such and so much endowment of body and limbs, sight and hearing, and other senses; such and so much activity and quickness or delicacy of brain, limited and influenced in such and such directions, by certain other phases of natural endowment or lack of it, and in such other ways and degrees by the food, experiences, general stimuli, and nutrition from environment, whether good or bad. The complex result is apparent in all his work and play.

All this rhythm or balance of forces is to a great extent natural and inevitable; but the most important balance is that between work and play. Just here our power of selection for the children affects the matter. I will try to make the distinction between work and play, that is, true work and play, for we have grown to have a false ideal of work as mere drudgery. I believe that play begins with activity for the sake of pure joy in it, as a kitten plays, or a little child moves its limbs and shouts for the mere joy in moving and shouting. Gradually some purpose, and the use of intelligence to guide it, creep in, but always joy in the activity remains the most prominent element; the child continues it for the sake of that. In other words, play is its own end. The ideal of work seems to me just the opposite of this; it is the realization of a purpose, an end outside of the activity; it may be, and often is, accompanied by joy in the activity, even among adults. Such work, we say, is congenial. I believe children's work ought always to be accompanied by this joy in the activity; as in the case of a tiny child, who, beginning parquetry pasting for the first time, said to me: "Oh, don't you wish Ralph was here to have this lovely fun?" But the purpose is the end, not the activity. This is true work. It not only gives room for creativeness, but stimulates it, for if the accomplishment of a purpose is joined with joy in the activity, it is not burdensome; we put our whole selves into it, and try every means to do it better and better. This is what Ruskin meant when he said that no good work was ever done unless the person would choose to do it, even apart from the living he earned by it. The earning is a consideration, but holds the second place. This is what I think Dr. Dewey means by saying that true interest lies in self-realization thru the accomplishment of a purpose, and the end being bound up with self-realization, any amount of effort, struggle, or difficulty will be acceptable for its achievement. This is what Froebel means when he speaks of disciplining the hands and fingers by means of an activity wherein are blended body and soul, feeling and thought; where there is purpose, but

also emotion—joy in activity. Now, I admit that it is often difficult to distinguish this sort of work from play, especially such play as shows some purpose, with the activity as an end, too. But work and play differ, as we see when we remember for how short a time a child can hold to a definite purpose in work, and for how long a time he can play. Here, I think, we have the true clue to the rhythm of educational work and play—the alternation of activity with a purpose, and activity for the pure delight in it. The basis for its alternation is very simple. It is the length of time a child can healthily and happily hold to and carry out a purpose; of course, this varies with his age, his growth in intelligence and concentration, and his range of power and choice among possible ends and activities. With the infant it is perhaps the alternation of a minute of effort with hours of unconscious joyous movement, tho I have known of a child of two and a half years working for half an hour in the attempt to tie up a pinafore into a parcel with a piece of paper and a string. I believe the change in rhythm is simply the shortening of the periods of impulsive activity and lengthening the periods of purposive effort.

Some students of children and their ways protest against any work at all in childhood, and I am sure their notion proceeds from the false ideal of work as mere drudgery of which I have spoken; for how could anyone urge that a child should make no effort and have no purpose in his efforts of which he was conscious? It is true that such a view has been attributed to the kindergartner by Mr. Fitch in his lectures on teaching. But this is quite opposed to Froebel's urgency that we should never tell a child the whole of the answer to a question, as it will be of more value to him to find out one-fourth of it by his own effort than to know the whole from someone else. It has been foolishly claimed for the kindergarten occupations that they produced the virtues of patience, perseverance, industry, etc. The truth is merely that they furnish an opportunity for the practice of these, which is very valuable if rightly used. Any handwork would do this, but all handwork is not so well planned to provide for progressive effort, new occasions opening out of old ones, with results in pleasure as well. We cannot claim a real educational value for anything which does not train in intelligent and persistent effort, and which, if continued day by day, may not be applied to greater and greater things. That children can understand the value of this was shown by a group whom I heard say to their teacher, who expressed a doubt of her power to draw a picture they wanted: "But if you try very hard and think very well, you surely can, Miss H——." She had been in the habit of saying these words to them, and they made the new application.

The practical consequences for all kindergartners of understanding the value of rhythm in activity should be simply the providing things to

be done, so short and simple, and each new step so founded on previous ones, that the period of effort is but a few minutes at a time, followed by an equal or longer time of pure play with the material — for instance, with the plaything made during the minutes of effort.

We might call co-operation another necessary elements in both work and play. This co-operation must be frequent, and, to be helpful, must be what we may call rhythmic or alternative, both sharing in fair proportion. The impression and expression processes, too, in education must be rhythmic to some extent, or proportioned in their alternation. How much more practical is the alternative recitation than that where the class only talks or the teacher alone lectures! The kindergarten morning talk is perhaps the best example of co-operation of this kind.

Now, in all this we must recognize the real need of a certain amount of suggestion and direction from ourselves to the children, partly as a counter-force to harmful influences from other environments; but we must keep in view the danger of overdoing this. In other words, we must preserve rhythm and balance. Every time we bring the social pressure to bear we act as the mouthpiece of accumulated social knowledge and wisdom, so far as we possess it; and it is right we should. But in so doing we are using the "must, have to" element, no matter how much we think we are working on the lines of natural environment. Our tendency to repeat and to require repetition of the child is strong. We stereotype ideas, and then the child's effort is no longer in the direction of expressing natural feeling, but of exactness, and stereotyped activity is the mere degradation of work. Just here comes in, I think, the need for recognizing the "may, want to" element. This in every child should be present in some measure in whatever he does, either in work or play. The love of experiment, resistance to the pressure of material and circumstances, the inward stimulus, the eagerness of curiosity unsatisfied, the sense of power over our own bodies or over material which makes us greedy for more exercise of it, may be seen in quite little children. The love of completing things which makes us struggle to carry out an idea and to finish what we begin, even against weariness or hunger; the sympathy or pleasure in sharing what others are doing — all these are, I think, the "may, want to" elements of the rhythmic movement. If, however, you notice their psychic character, you will find that, while not so apparently fundamental or primal, these "may, want to" elements are what have made for progress in the whole life of humanity; and if we lose sight of progress, what becomes of education? In biologic development has not spontaneous variation been one of the great means of progress? Shall we not allow the necessity of a parallel element in education, whether in work or play?

If we believe in co-operation as an underlying need of all work, we shall not need to emphasize it each minute. The teacher does not find it

necessary to recite alternate phrases of the multiplication table with the child, nor to read the alternate words of his reading lesson. If rhythm is truly an underlying law in all things, we are not the only persons to whom it can ever be apparent, nor need we feel, as some kindergartners seem to, that every moment must be spent in carrying out rhythmic exercises which the children would not discover for themselves if we did not teach them. I want to plead for a sane, reasonable attitude toward the practical use of rhythms, as well as other new ideas.

I spent a morning recently in a kindergarten where one hour was occupied in rhythms of some kind, first in movements made to music and then in work jingles. Nearly all the movements were too complex to have been developed by the children, and most of them were step-dances requiring small and complex detail, and with changes requiring keen observation and perception. During the hour not one was suggested or originated by the children. Our modern tendency to take up a new idea with such enthusiasm as to forget for the time that any others exist was well satirized in a recent article in *Lippincott's Magazine*, called "The American Fondness for New Movements." I think our young kindergartners need more to be told "how not to do it" than urged to take up new ways of doing anything; and I urge, therefore, that we spend more time in studying what already exists of rhythm in work and play than in devising new forms of it.

RHYTHM IN THE KINDERGARTEN

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May I ask you to bear with me if I speak to you primarily as a musician rather than as a kindergartner—that is, as one who, after a varied musical experience of twenty-five years, has come to share the viewpoint and become heartily committed to the principles of the new education?

I am in sympathy with an eminent music educator (not music teacher) who recently said to a class of teachers: "I am not interested in music—I may say not nearly as much so as I was many years ago; but I am interested in education, and in music as one means of education." Such a frank statement reminds us that there are an old and a new attitude toward the entire subject of music, toward its place, its meaning, and its power in life.

How often we hear, after a possibly sincere attempt to interpret a musical masterpiece, such remarks: "Oh, how can you remember all that without your notes!" How little we hear about music, and how much

about notes, about piano technics and feats of memory! This is maddening to one who feels, understands, and would voice the noble content and the high message of a work of art.

We have all had the painful pleasure of seeing children give finger exhibitions on the piano, to their own great satisfaction and to the envy of others, deceiving and being deceived into thinking that they were expressing music. Being able to play the piano does not necessarily prove one's capacity to grasp a musical idea, any more than being able to say that "two times two make four" and "three times three make nine" proves one a mathematician, or the drawing of geometric figures shows one's understanding of the science of geometry.

We turn gladly to the new attitude which asserts that we may and should prove our great principles of development thru this art of arts also, thus letting it serve in its high way the good purposes of education. Disraeli voices this idea well when he says: "The greatest advantage that a writer can derive from music is that it teaches most exquisitely the art of development."

The new era in music education is characterized by statements of a somewhat startling sound: "The human being is by nature musical;" "Every child is entitled to free musical expression;" "Every teacher, certainly every kindergartner, ought to be musical." And there are those who are proving these claims as rational and true by working with so-called hopeless cases among the children of the kindergarten, as well as those of an older growth in the training classes. Three interesting examples of such work with young children are reported from recent work both in the East and in the West. One seven-year-old girl was brought to the class as an example of absolute lack of music; after five or six lessons, which were interrupted by the close of the class term, she sang a simple melody twice in a sweet voice. An eleven-year-old girl who talked in almost continuous monotone, varying only from A to B, after ten lessons of from fifteen to twenty minutes each, sang simple melodies on A and B above middle C. Again, a seven-year-old child, in six short terms of fifteen- to twenty-minute lessons, two or three times a week, sang a long melody, wrote it out, and played it, or, as I should prefer to say, sang it on the piano:



This was early in the history of this line of music development, otherwise the same results could have been reached in a much shorter time.

Several instances taken from my own experience in the kindergarten training school may be of interest at this point. One young woman of about twenty-five years came to the music class only because it was obligatory, being firmly rooted in the conviction of utter helplessness and hopelessness in the direction of music. She had no ear, no voice; in short, music was to her a sealed book. And, indeed, it seemed so. If one sang A, she would give back F; if you gave middle C, she went into the depths! But there was inexorable conviction on the part of the teacher and stubborn courage on the part of the student. Result: this kindergartner now sings the simple kindergarten melodies with her children, and I believe even plays a primitive form of accompaniment.

A touching story came to light at the close of the first session of the music class of the year, the students having been greeted as follows: "You know, girls, that I expect you all to sing. It is quite natural to sing, and none of you can be deprived of this divinely given right." An earnest young woman came afterward with tears in her eyes and told of her longing to sing from earliest childhood; how she had been called unmusical, had been laughed at, and had become quite disheartened. She had many a time gone deep into the neighboring woods and sat down, with only the birds for her hearers, to voice her child heart in song. Who knows but that it rang out sweet and pure, being freed for the time from a verdict as cruel as it was ignorant? This child needed only tactful sympathy and loving help to blossom into freedom in song.

Another student, now a successful kindergartner in New York, sought after for her musical intelligence among other good qualities, seemed utterly wooden and unrhythmic in her piano work, and had long despaired of better things. With persistent, patient work on the part of her teacher and an earnest taking hold on her own part, this was overcome. After a term of private work, creative endeavors bore testimony to increasing rhythmic sense.

Mazzini asserts that "action is the embodiment of idea." When Michael Angelo was asked the secret of his power to express so clearly and marvelously his ideas in marble, he replied that he thought and kept thinking on a thing until his hand kept time to his thought, or, as he no doubt meant, to the rhythm of his thought.

It certainly appears sane and logical to follow this progress from idea to its expression, from music conception to music expression or technique, as faithfully in this educational channel as in the other relative lines.

It is scarcely necessary for me to tell this audience that the work from which I have drawn the above illustrations is based upon that principle which governs modern education—the unfoldment of idea from within outward. You have also recalled the lines parallel to this by which the other art forms of expression are being developed, such as drawing, modeling, story-making, etc.

It is in the training class that the student must be inspired and quickened to the larger view of the meaning of music, its relation to the sister-arts, to education, and to life. One of the means to this end has been the search for quotations on the part of the class members which should adequately express their own thought about or feeling for music; the finding of some passage defining music or its functions; or some lines expressive or prophetic of the largeness of its message to mankind. These are discussed in the class together with the teachers, and preferences frankly indicated. The following are some of the memorable statements collected in this way:

He who explains music explains the universe.—*Schopenhauer*.

All one's life is music, if one touches the notes rightly and in tune.—*Ruskin*.

All deep things are song. See deep enough and you see musically. The heart of nature being everywhere music, if you can only reach it.—*Carlyle*.

Beethoven! How much is in that word! In the deep tone of the syllables there seems to sound a presentiment of immortality.

I will sing with the spirit and I will sing with the understanding also.—*St. Paul*.

Some of the books to which the students are especially referred might form the nucleus of a bibliography on the subject of the higher criticism of music, or the larger concept of music as an art:

Music and Poetry, by Sidney Lanier, notably the first chapter entitled "From Bacon to Beethoven."

Angel's Wings, by Edward Carpenter; opening essay on "Art and Democracy."

Religion in Recent Art, by Dr. P. T. Forsythe.

Parisfal, or the Finding of Christ through Art, by Albert Parsons.

Music and Morals, by Haweis.

And last, tho not least, Browning's *Saul*, *Fra Lippo-Lippi*, *Abt Vogler*, and others.

During the year just closed our students were asked to write out what they knew of or about Beethoven or his music. The answers were rather appalling as to meagerness, and the mythical, or at least questionable, tale about the composition of the "Moonlight Sonata" seemed the sum and substance of the average student's knowledge of the great master. We felt distinctly, as often before, that there must be a background of culture in the literature of music, and at once arranged to give fifteen minutes once a week to the study of Beethoven, and an introduction, as it were, to his great masterpieces. We had the temerity to take up the symphonies themselves. From these the students heard, sang, and expressed the rhythms of the themes of chief importance. Symphonic form, the relation of the music ideas in certain movements, the different movements and their relation to the whole symphony and orchestration, were all touched upon. This was done thru discussion and illustration on the piano. We were specially favored by and deeply grateful to Mr. Theodore Thomas for the cycle of Beethoven music which he presented with his orchestra during the season, which gave the students the opportunity of enlarging their Beethoven experience. On these occasions they

expressed themselves understandingly, and showed an appreciation of the deep significance of pure music. This larger concept of music was directly helpful in the simplest and most practical lines of their music development. It helped them to break loose from the more limited sense of rhythm as confined in a time limit or bounded by bars.

We speak of the rhythm of the spheres, or of rhythm in a picture, or even in a flower. In this large and true sense rhythm defines itself as the proportionate unfoldment of idea. The simplest approach to the study of rhythm would appear to be thru verse rhythm. A child is easily led to express its interest in dolly, puss, or bird, in some simple form of poetic rhythmic feeling, having already in the verse the *sine qua non* of music—rhythm.

With your permission I will give a few illustrations from very recent observations: A child of six years who had not sung—that is, consciously attempted to sing; for I hope it is rare to find the child who does not sing in child fashion in its unconscious playtime—to repeat, not only she had not sung, but also said that she did not want to sing, but was at once interested in making a story about dolly. Thru an intimate and sympathetic talk between teacher and child, this line took form: “Dolly dear can shut her eyes.” The child was then asked to bring a melody to fit these words. The next day she brought the following:



This was sung in sweet voice, true intonation, and in perfect rhythmic form. A little seven-year-old girl in the same class, having much less rhythmic feeling, after a week of lessons, was given this melody:



with the words: “Downward fall raindrops all.” She showed clearly her sense of the proportionate development of the thought and the line by changing it to, “Raindrops all downward fall,” which in quality of sound, as well as logic of rhythm, is surely the truer rendering.

The study of rhythm is thus approached thru verse. How deeply verse and rhythm, poetry and music, are allied, and how far the study of the first is enlightening in the development of the second, is amplified in Sidney Lanier's *Music and Poetry*, while Mr. Moulton, in his *Literary Study of the Bible*, has made the greatest and most exhaustive study of

this subject, treating it in its broadest significance. The illustrations which we have just considered also show that melody is the most simple and childlike musical expression thru which rhythmic ideas unfold.

I should like to add that, while verse rhythm is so simple and happy an introduction to this study, it leads naturally and rapidly to the understanding of rhythm in its more abstract instrumental form.

I think we are all coming to realize that rhythm has its important and indispensable function in that universal history of mankind which Hegel defines as "progress in the consciousness of freedom." Our harking back to rhythmic plays and skits and figures in the kindergarten certainly is a re-acting of an element which is conspicuous in the childhood of the race, as seen in the weird and natural rhythmic swayings and dancings of African and Indian. The dance would seem to be also in the child-life the most primitive form of rhythmic expression. We give it honorable place for its dower of graceful, unconscious, free bodily expression. The present wave of rhythm work in the kindergarten surely is acknowledged as an advance into the personal actualization of freedom in movement. So far, so good. It is also said to open the child to musical impression and feeling, or, more truly expressed, to awaken its responsiveness to musical expression.

Opportunity should also be provided for children to experience this law in a more conscious way thru melody, and it should go hand in hand with, and be wedded to, its more elemental advanced form. I believe that we are only beginning to grasp the possibilities of rhythm in the kindergarten. This is a noble field for fearless and progressive work. We find encouragement in the earnest and thoughtful work of those already so helpfully active in this comparatively new field.

May I again quote Lanier, who says: "The art of an age will be always complementary to the thought of that age." He further states that this age is characterized by the rise to its highest development of science and of music. He argues that the mighty reach of music into the unknown and the potential, or, as we might say, into the spiritual realities, is the great swing of the pendulum away from the "holy mania for the realities of physical science." In fact, this is the reaching out of the most scientific age after spiritual equilibrium. Beethoven, however, asserts the inherent unity of the two, when he says, in the midst of the revolutionary conditions of his own time: "It is art *and* science alone that reveal to us the hope of a loftier life."

If music has such a noble function—if man is naturally and normally a God-made musical being—to be a musician should be a noble and consecrated calling. It is not generally so considered. To dub a man a musician is not always a compliment, often the reverse. To dedicate a child to a musical career is, in the thought of many, synonymous with sending him to destruction; and too often this appears substantiated by

fact. We find this reluctance on the part of parents and guardians exemplified in the lives of musicians who only thru persistent disobedience were able to follow their God-given bent toward musical expression. We remember the little Bach—our great-grandfather of piano composition—patiently copying music by moonlight, because of his uncle's prejudices. Where would be our well-tempered clavier, our passion music, but for the divine inner necessitude which impelled him into music expression? Handel was kept from school for fear he should learn music, and played a smuggled spinet in the garret late at night for fear [of being surprised and robbed of his treasure. Think of the world deprived of his master-concept of the story of the Messiah in song! You may have heard the story of a well-known Chicago boy singer. When his voice began to change, someone asked his father whether the boy's musical education was to be continued and a musician made of him. The father promptly answered: "I hope he'll be good for something better than that!" Altho so many musicians have failed to demonstrate the unity of art and life, in both their personal careers and in their interpretations of music, we remember with reverence the great masters—Palestrina, Bach, Beethoven, and a goodly following—who lived in harmony with this unity and subject to law, because of their *love* for the order and for the *beauty* of holiness. We know that the true artist loves goodness, because it is beautiful, and that where truth and beauty are realized as one—inseparable, the unity of life—*there* is serene, triumphant, holy, joy-revealing art. Then the artist becomes the seer.

DISCUSSION

CHARLES H. KEYES, supervisor of public schools, South Hartford, Conn.—It has been said that kindergartners have made a cult of themselves and their business. That suggests your disposition to clothe your thoughts about children in the language of the philosopher. If you wish to educate us who are not familiar with the art and science of your work, I beg of you to give it to us in simple language.

I believe in education thru music by the methods outlined to us in the paper just read, but we must not expect that all teachers are able to use these methods with success without special musical training.

There is an impression abroad that the business of the kindergarten is to prepare children for the primary school. This is an error, for in many respects your work points away from the traditional primary school. It is the primary school that must change and prepare itself to receive the child trained in the kindergarten. I have heard primary teachers say that they could get along with any children except those who had been trained in a kindergarten.

Your first, second, and third aim should be to make your kindergarten child a good animal. You can never make an angel of him if you have not first made him a good animal. Your work should enable him to eat better, play better, sleep better. In all your methods the child should be your guide. You should be as ready to use in your

work roses, vegetables, the shovel, the hoe, and other things of a child's environment, as the cubes and cylinders and squares of paper.

The great aim of the kindergarten, it seems to me, should be to lead the child into a realization that play is as important as work, and that work is as pleasant as play, and that the keenest joy of school life is to be a helper of his fellow-pupils and his teacher in all the occupations of daily school life. In this way he will come truly prepared for the primary school. When you do this, the primary teacher will say: "I must study my business in the light of kindergarten methods."

The primary teacher should know more of your work, and you should know more about the primary teacher's work. When the time comes that the child shall indeed lead both kindergartners and primary teachers, we shall not be troubled about defining the relation of the kindergarten to the primary school.

DEPARTMENT OF ELEMENTARY EDUCATION

SECRETARY'S MINUTES

FIRST SESSION.—THURSDAY, JULY 11, 1901

The department met at 3 o'clock P. M. in the assembly room of the Central High School, and was called to order by the president, J. W. Carr, of Anderson, Ind.

The following songs were rendered by Miss Esther St. John: "The Clover," *McDowell*; "The Parting," *James Rogers*; "The Open Secret," *Huntington Woodman*.

A paper on "The Church and the Public School" was read by T. A. Mott, superintendent of schools, Richmond, Ind.

The discussion was opened by N. C. Schaeffer, state superintendent of public instruction, Harrisburg, Pa., and was continued by R. A. Ogg, superintendent of schools, Kokomo, Ind.

The second subject, "Economic Basis of Art," was presented by Charles De Garmo, professor of science and art of education, Cornell University, Ithaca, N. Y.

The paper of Dr. De Garmo was discussed by Mr. George Gunton, of New York, and Miss Roda Selleck, of Indianapolis, Ind.

The Committee on Nominations was appointed as follows:

George B. Cook, Hot Springs, Ark.

Adda P. Wertz, Carbondale, Ill.

Robert Hamilton, Huntington, Ind.

SECOND SESSION.—FRIDAY, JULY 12

The department was called to order at 3 P. M. by President Carr.

The meeting was opened by a vocal solo, "Spring," by Miss Lois Inglis.

Dr. William Goodell Frost, president of Berea College, Berea, Ky., addressed the department on "Educational Pioneering in the Southern Mountains."

A paper on "Nature Study in the Public Schools" was read by Rev. William J. Long, of Stamford, Conn.

Music — "Endymion," *Lisa Lehmann* — by Miss Isabel Weir.

Mr. Long's paper was discussed by Miss Adda P. Wertz, critic teacher, Southern Illinois Normal University, Carbondale, and Mrs. Mary Rogers Miller, lecturer on nature study, Cornell University.

Amos W. Butler, secretary of board of state charities, Indiana, presented a paper on "Education and Crime."

The nominating committee reported the following officers for the ensuing year:

For President — R. A. Ogg, Kokomo, Ind.

For Vice-President — J. J. Doyme, Little Rock, Ark.

For Secretary — Adda P. Wertz, Carbondale, Ill.

The report was adopted and the officers declared elected.

The meeting was then adjourned.

B. F. MOORE,

Secretary pro tem.

PAPERS AND DISCUSSIONS

THE CHURCH AND THE PUBLIC SCHOOL

T. A. MOTT, SUPERINTENDENT OF SCHOOLS, RICHMOND, IND.

In the history of the race the influence of the church is as potent as that of any of the institutions of civilization. Our religious views, feelings, and biases are among our strongest sentiments and motives. The religious beliefs of the individual and of the nation are among their most sacred treasures, and as such must be vital factors in any complete consideration of questions of the education and development of the race. Religious thought, sentiment, and purpose bear so important and vital a relation in the outward life of mankind today that it is hardly possible that any intelligent citizen, teacher, or parent should deem it best for a child to grow to maturity without the elements of a religious education.

The appreciation of the meaning and scope of education is the greatest problem now before mankind. The supreme center in all education is the child in its relation to its environment. What the child is, its development, the end in view, the means to be employed, its relation to nature, to men, to society, to divinity, are all questions involved in considering the subject of method and scope in education. The problem in education is quite definite. Given the children at the age of four, what shall be done with them until the age of eighteen or twenty, so that they shall evolve into desirable types of men and women?

Education has been rightly defined as "the adaptation of a person to environment, and the development of capacity in a person to control environment." By "environment," in this definition, we mean two things: first, physical surroundings, and, second, that vast accretion of knowledge and its results in habit and conduct which we call civilization—civilization crystallized into the institutions of home, state, school, society, and church.

The free citizen must take his place in the world of society of which he is a part. The child is born into a pre-established ethical order, that of law and institutions. These he must take up and objectify in his own life, if he reach his highest freedom. The family, state, church, and society are the pre-established institutional order into which he comes. These he must make a part of himself; he must make them over, re-establish, and reproduce them in his own life. Becoming a man, he is to re-create the family in his own household; he is perpetually to renew the state, for he is the final lawmaker; especially is he to preserve and reconstruct society in accordance with new times and new ideas; he is to perpetuate the universal church by reproducing in his life, and thru his

life, the fundamental principles of true living which he has ever tried to exemplify.

The school as an institution is the organ of education. It is set apart and dedicated to the work of forming a better individual and thru the individual a better social life. Its function is performed thru the interaction of the individual and the social group of which he is a part. Between society, on the one hand, and the growing individual, on the other, the school stands as a mediator, controlling and directing the play of each on the other.

A vital part of the school's work is to lay hold of the complexity of human experience, as existing in the institutional life in which we live, simplify and organize it, and then bring it into the closest touch with the life of the child. In this process the school must take the adult expressions of life and bring them to the plane of the child's understanding. Each of the institutions embodies vital experiences of life, which are by inheritance the right of every child. Church doctrines, principles of government, social customs, laws of business, are all material upon which the life of the child must feed.

The school must know what principles of activity are valuable to the growing individual, and must select these principles from each of the fundamental institutions and emphasize them in the life of its pupils. In this manner the life of the growing child is adjusted to the larger social life of which he is a part. It must not be forgotten that each individual will contribute to, as well as share in, the values of social life. As he partakes of the best life the race has evolved, so will he return to this best experience of the race the results growing out of the interaction between his life and that of the social whole. As he takes, so shall he give.

The great movements in the modern educational progress have all sought to bring closer together the life of the school and the life of the people. Students of education are recognizing that the true purposes of the school can be rendered possible of fulfillment only by the fuller co-ordination of the life of the school and the life of society. The new education seeks to remodel our thought of the school, to the end that the child's experiences may be so nearly continuous that when he leaves school he shall be able to enter into the activities that surround him, thru the life he has already lived. The school has year by year become more socialized in its organization, methods, and curriculum. We are everywhere recognizing the fact that, if the child be able to enter the world of experience when he leaves school, he must be made familiar with the chief values of social activity: the school and the state, the school and industry, the school and home, drawn together in a closer union.

The place and importance of religion as an element in human life hardly need discussion. The fact is that "there has not been a single tribe or people known to history or visited by travelers which has been

shown to be destitute of religion of some form." It has been argued by some that all religion has had its basis in superstition and fear; that it was not universal, and not a vital element in the civilization of man. These contentions seem to me to arise from an ignorance alike of the history of the race and the laws of human nature. Religion is a part of man's psychical being. In the nature and laws of the human mind, in the intellect, emotions, sympathies, and passions, lie the well-springs of all religions, modern or ancient, Christian or heathen. To these we must refer, by these we must explain, whatever errors, falsehood, bigotry, or cruelty have stained man's creeds; to these we must credit whatever truth, beauty, piety, and love have glorified and hallowed his long search for the perfect and the eternal.

There seems to be a general response from the human heart, as well as from the history of the race, to that clear statement of Hegel's, when he says: "Religion is, for our consciousness, that region in which all the enigmas of the world are solved, all the contradictions of deeper-reaching thought have their meaning unveiled, and where the voice of the heart's pain is silenced—the region of eternal truth, of eternal rest, of eternal peace." If religion is defined, in the words of Dr. Martineau, as "the belief and worship of the supreme mind and will directing the universe and holding moral relations with human life," then civilization is unintelligible without it.

But it is said by many that morality takes the place of religion, and that a satisfactory substitute for religious training is instruction in morals and civics. This view has been widely held and is defended by many able minds. We believe, however, that the field of moral and civic instruction is quite distinct from religious training. The moral phases of life have long been closely related to the religious life; nevertheless the two are quite separate. Dr. Butler, in discussing this question, has called attention to the fact that religion has not infrequently, in the history of the race, been immoral in its influences and tendencies, and insists that to confuse religion with ethics is to obscure both. Religion must be apprehended as something distinct and peculiar, if it is to be apprehended at all. When Matthew Arnold said "that religion is ethics heightened, enkindled, lit up by feeling; and that the passage from morality to religion is made when morality is applied emotion," he was surely and clearly wrong. "If the history of civilization bears unerring testimony to any one proposition, it is that morality requires for its highest efficiency some kind of religious basis."

A system of morality based upon mere expediency, solely upon deductions from human experience, or upon utilitarian grounds, can never produce the highest practical moral life. Some kind of religious belief, sanction, and aspiration lies at the foundation and root of every system of morality that has borne noble fruit in the world. In the conflict

of life, when in the midst of success or failure, temptation, despair, or sorrow; when the battle is strong between the forces of good and evil, the human heart finds little aid in the questions of expediency, utility, or custom, but intuitively reaches upward in the hope of aid and inspiration from an infinite, all-loving, and all-powerful God and Father.

The subject of religious education is venerable in its tradition. From the earliest history of religious thought the education of the children has held a prominent place. From the beginning of human thought the child has been the pivot upon which the history and institutions and religion have hung. Without dwelling on ancient Jewish history, we can but refer to that profound interest in childhood which underlay the whole structure of Jewish thought. Every synagogue had attached to it a school. The education of their children was one of the most impressive features of their national life. In the time of Jesus we find the religious instruction of children commanded the most serious interest. Child life was holy to the Jewish thought. When our Lord said, in speaking of children, "Their angels do always behold the face of my Father which is in heaven," and, "Suffer little children to come unto me, and forbid them not, for of such is the kingdom of heaven," he was expressing the true Jewish estimate of childhood.

As Christianity passed out upon its mission it carried this estimate of childhood with it. Thruout the apostolic age the story of the Christian education of the children is ever present, and the Christian church has never broken with this old thought of the holiness of the child. The early church, true to this instinct, went at once to the childhood of the empire. She gathered the children in every possible way into her schools. She made the school the connecting link between herself and the world. Emperor Julian, when he determined to take control of education into the hands of the state, said that "unless he could arrest the movement of the church in the schools, the progress and triumph of Christianity were inevitable."

For a moment let us consider the status of religious education in the four states whose educational institutions pre-eminently lead all others. In France and in the United States formal religious instruction is entirely banished from the public schools. In Germany and England religious instruction is made a prominent part of the work of all schools.

In probably no other country in the world is religious instruction so systematically and thoroly given as in Germany. The principal function of the German schools is officially declared to be the "making of God-fearing, patriotic, self-supporting citizens." The Germans would no more think that religious instruction could be omitted from the program of instruction than mathematics or languages could be left out. Every teacher receives religious training for his work.

Today their hour for religious instruction is the first in the morning.

The course of study in the primary grades is made up of Bible stories, the memorizing of church hymns, the catechism, and selected scriptural texts. In the middle grades it is their aim to present a tolerably complete idea of the Christian religion, some church history, and the meaning of the forms and ceremonies of the church. In the secondary schools the work of the lower grades is reviewed and the history of the church and the Bible introduced. A recent writer on German education says that "this religious instruction is so imparted that emphasis is laid upon the living acceptance and inward appropriation of the facts of salvation and the Christian duties." He further says: "I rarely found a schoolboy whose judgment I considered of value in other matters, who was not deeply impressed with the worth of his religious training."

We look instinctively to England, as a free Protestant nation, for an example of what can be done in the matter of religious education in the schools of the masses. Here we find that at least 50 per cent. of the children attend ecclesiastical schools, and about 50 per cent. attend the schools under the direct control of the state. In the church schools the element of religious instruction forms a prominent part of all courses of study. In the state, or board schools, as they are called, religious instruction is regularly given, but the teaching of the catechism, creeds, or church formula, or the institution of any distinctively church ceremonies, is forbidden. In all private or ecclesiastical schools receiving state aid the study of religious subjects is elective, and parents so desiring may withdraw their children from such classes. Thus a great free democratic people has provided in its elementary schools for the religious training of the children of the state.

In France we find a marked contrast to the conditions in Germany and England. Here in the great system of state education we find that formal religious instruction is entirely forbidden, and a system of training in morals and civics is substituted in the place thereof. Before the great revolutionary movements of the latter part of the eighteenth century, education in France was entirely in the hands of the church. In 1764 came the expulsion of the Jesuits, partly for political reasons and partly because of the dissatisfaction with the influence of the Jesuit teacher in the schools of the country. The methods of religious education had all tended to the upholding of the Roman church, and at the same time the support of the political ideas of the ruling class. After the revolution and the establishing of the republic, religious education was entirely separated from the schools of the state.

Turning to our own country, we find that any formal religious instruction is largely excluded from our public schools. When the state-supported school came into existence in America, the intense diversity of religious opinion then existing among the people found expression in the prohibition of any formal religious instruction on the part of the teachers

employed by the state. This view, that the state-supported school must refrain absolutely from exerting any direct sectarian influence, has been so general that it has led to sweeping provisions in the constitutions and statutes of nearly all the states against sectarian religious instruction of any kind in the state schools. The extreme American opinion was expressed by the supreme court of Wisconsin, in 1890, when that court, in an elaborate opinion, held that the reading of the Bible—King James' edition—in the schools, tho unaccompanied by any comment, constituted sectarian instruction. In the same opinion the court says: "The priceless truths of the Bible are best taught to our youth in the church, the sabbath school, the parochial school, the social religious meeting, and, above all, the home circle."

The best period of human life is childhood. It is the richest and largest. It has most sympathies, the most capacities, the most pleasure of any time between birth and old age. If the principles of Christian ethics are to take root in the life of our people, the work must be begun in the schools. The true warp and web of Christian character and faith are necessarily wrought out in the school period of life. Ideas cannot become the permanent possession of the world unless they enter in thru the door of childhood. The results of child study have shown to the educational world that it is at the age of from twelve to fifteen, the opening period of adolescence, that the individual is most susceptible to the influence of culture and refinement. In most lives this is the time of the dawn of the real educational and religious instincts. It is the waking time of life in body, mind, and heart. Now it is we find that subtle emotions are settling into dispositions, and dispositions are becoming character. The great instincts of altruism begin to be felt and to transform the soul, and there comes to the individual the great conception that life is after all not to be lived for self, but for others. There comes to the soul the instinct of subordination and sacrifice, "of being ready to die for that we should live for." It is in this period that the principles of religious character can be most surely appropriated by the life of the individual. This is the age of confirmation in the Greek, Roman, and Lutheran churches. The statistics of the leading Protestant churches show that this is the age in which occur the greatest number of lasting conversions.

The great need of the complex civilization of the twentieth century, with its diversity of economical interests, its conflict of principles and the struggle for supremacy, is Christian manhood. But the agencies for the development of this quality among the masses of the people are limited. The churches and the Sunday schools in their many lines of activity are doing much; but they have but one or two hours a week, and nearly half the children are not brought under their direct influence at all. If the principles of Christian character are to predominate in the future

civilization of America, the state schools must assume the responsibility, in a measure at least, of giving to all the children that come under their charge a basis of religious education.

What doctrines, beliefs, and sentiments shall the public schools seek to inculcate? The course of instruction would necessarily exclude the teaching of any sectarian catechism, creeds, or church formula. The work must be restricted to broad, universal religious principles. I would venture to state the leading purposes of public religious training as follows:

1. That all children should be lead to believe in the Divine Being, in God as the Father and Creator of all.
2. That there might be developed in all a general intelligence in religious matters, and a tolerably complete idea of the Christian religion, its principles and precepts.
3. That there might be inculcated in the minds of all growing children a spiritual conception of life, a Christian spirit, and a permanent religious attitude of mind.
4. That there may be early developed habits of Christian conduct, and a personal acceptance and an inward appropriation of the facts of salvation and Christian duties.
5. That there should be taught in the grammar grades and the high school the history of the church and the literature of the Bible.

As a last thought let us consider what means may now be employed in the school that these results may be obtained. And let me say that the public schools, even with the formal religious instruction forbidden, must not be considered *godless*. In many ways the highest and purest religious influences pervade the spirit of many of our schoolrooms. When children are brought face to face with truth of any kind, there is, if the subject be rightly appreciated by the teacher, a strong tendency to fill the heart of the boy or girl with admiration, with wonder, and with awe. This influence is in a high sense religious in its nature.

Everywhere God touches man thru the earth, by means of the outward life of flower, of star, of mountain, and of storm. When Jesus told men to consider the lily how it grows, he was telling them that they could find in its unfolding life something to fill their lives with richer sacredness and power.

In the study of history there is a rich field for the development of religious thought and feeling. To leave religious thought and influence out of the history of the world would leave most of its events without explanation.

In literature the true teacher has an agency that, rightly used, leads to the richest development of religious thought. The hope, the sacrifice, the heroisms and fidelities, that literature has enshrined in its most perfect art, form the subject-matter for religious inspiration to every earnest student.

The most potent of all forces is the personal life of the teacher. Young lives are easily molded and directed by the strong, earnest life of a Christian teacher. If our schools are taught by men and women of sound ethical and spiritual lives, devoted in the most conscientious way to the work of building up in the children the highest elements of worthy manhood and noble womanly character, shall we not have met the most important condition of religious education?

In conclusion, it is maintained that the highest good of the individual and of society as a whole demands that the public schools of America, along with physical, intellectual, and other forms of culture, shall make some systematic effort to develop and train the highest spiritual consciousness of the children, and shall seek during the school life to bring into the experience of the child the typical and fundamental activities of the broad religious life of society. To do this in a rational way, without narrowness or sectarianism, but in the broadest, most catholic manner, is not only the duty, but a great privilege, of the school.

DISCUSSION

R. A. OGG, superintendent of schools, Kokomo, Ind.—There should be no chasm between the school and the church. They are working to a common end. Let me deal with the question in the concrete, and speak of some of the particular problems that arise. There are those who hold that school-teachers should not teach in the Sunday school. To this I must reply that the fact of being a teacher neither creates nor releases from the obligation to render service to the church in its various activities. The teacher of experience and power in the school is needed to aid in making teaching in the Sunday school more valuable, and, if health will permit, the duty is clear. Some doubt may properly exist as to the attitude of the school toward the exercises in connection with certain church festivals, as Christmas and Easter, the Jewish New Year, etc. The demand of the church for some of the time of the children to prepare for these occasions is to the detriment of the school. Shall children be excused? There must be caution here that the school may be protected. But in so far as pupils can be allowed to participate in these exercises, it should be done, that they may feel that the school is in harmony with the work of the church. A question sometimes arises as to the propriety of the schools having exercises for these special church occasions, whether the school may not discount, or at least anticipate, the Christmas exercises of the church. Such is possible, and the more so because the school is able to drill more fully for these performances. But, on the whole, the influence is good, for the child finds that the same ideals exist in the school and the church. The question of supreme importance is that of the use of the Bible. The hostility to its use that existed a few years since has largely ceased. To my mind there can be no real question in this land that the Bible should be used. It is the exclusive book of the church; it ought not to be the excluded book of the school. While many teachers use the best literature they can find for teaching ethics, and with good reason, it remains true that there is no other book so replete with ethical teachings as the book of the church, and children should not be allowed to regard it as foreign to the schools. As principal of a high school, I formerly used the Bible for regular devotional exercises, and yet, I am sure, never offended any in my school. When I left the school, my pupils could think of no more appropriate gift as a token of their good-will than a fine Bible, and in

the gift Catholic and Jew united with Protestant with equal enthusiasm. The Bible stories cannot be excelled for real value, and some of the best teaching of the Bible I ever saw was by two teachers this last year thru the use of the biographies of some of the Bible heroes.

THE ECONOMIC BASIS OF ART: CAUSE AND CURE OF ART UNRESPONSIVENESS IN CHILDREN

CHARLES DE GARMO, PROFESSOR OF THE SCIENCE AND ART OF EDUCATION,
CORNELL UNIVERSITY, ITHACA, N. Y.

Few will claim for our art instruction that it produces all that is desirable in its influence upon the subsequent lives of the people. We see that it is not always poverty, so much as artistic insensibility, that renders the common American life so pathetically barren of art influence. Our houses, our walls, our furniture, our tables, our clothes all bear witness to art unresponsiveness, if not in the school itself, at least in the period when the school is a thing of the past.

Yet the school tries to do its duty in this as in other departments. Millions of children are patiently, not to say painfully, taught something of art appreciation, something of the power to produce art; a little ability to use the pencil is imparted, a little familiarity with art masterpieces is acquired. Yet genuine enthusiasm among the children during the progress of the work, and permanent transforming influence of the art work upon subsequent life, are all too rare. Not infrequently the art instruction is like a spell of hot weather, a thing first to be endured and then forgotten.

It does not concern us to inquire whether the art instruction in our schools is not as good as that in any other department. This may be unhesitatingly granted. Yet here, as elsewhere, mistaken ideas as to the end and means may paralyze the efforts of thousands of teachers and millions of pupils.

First of all, we need to note the case of those rare examples of artistic genius found now and then among children. It is from this class that the great artists always come. A breath may stir their sensitive souls into an enduring passion for art. To see a true work of art is with them to worship it; to possess a pencil or a brush is to acquire skill. The school, however, does not produce genius; it can at best but discover it, and offer it opportunity. The inborn art impulse will do the rest.

The burden of our work lies in the fact that teachers without artistic genius must teach the pupils who are likewise deficient. The mass of children have but latent and limited artistic possibilities, which can be developed into permanent usefulness only by methods and aims that appeal most powerfully to the strongest artistic motives. With such

pupils mere exposure to art does not awaken artistic appreciation ; mere drill upon technique does not give artistic power. Lacking the vital motives that lend inspiration to vision, and patience to the acquisition of skill, the eye remains dull and the hand inert.

If, therefore, our art instruction is to become more fruitful, we must perceive more clearly what are the most potent art motives that can be brought to bear upon children.

Let us first examine our current art ideals, to learn, if possible, in what they are defective. It is a curious fact that, tho evolution has for forty years determined the course of biology, of history, of sociology, of ethics, and of psychology, its influence is only here and there to be traced in education. Even Spencer, the great evolutionist, when he wrote a book on education, for the most part left evolution out of it. Just as up to the present it has been the custom to make a cross-section of the adult mind in order to learn what the child's mind is, so it has been the practice to make a cross-section of developed art to find out what the child should be taught. In other words, we have gone to the art genius to learn the ends and means of art education. The first effect is that we are blinded to true artistic progress by accepting the art genius' dictum that art is an end in itself. This is what Professor Baldwin calls the *autotelic* theory of studies—each becomes its own end. The fact that there has been a progress in art, that it has had diverse origins among primitive people, that it has adapted itself to the genius of a nation or an age—all this is forgotten. It is assumed that there is an absolute art, whose end can be in nothing but itself, and whose celestial emanations are somehow to illumine the soul of youth. The result is that what I call "Madonna art" loads the walls of our schoolrooms. Catalogs are constantly sent out from art and educational centers, three-fourths of whose selections are chosen from romantic art, the Madonna being the leading type. The effect can hardly be otherwise than abnormal. Being stimulated to admire what they cannot possibly appreciate, some are thrown into a harmful state of sentimentality ; others are left in a state of indifference or youthful contempt ; none, with the possible exception of a genius now and then, are healthfully stimulated by such means to a higher artistic life. The motive is too remote, too abstract, too far removed from anything that pertains to life. As soon as art is abstracted from the motives that lead a people to action, it does, indeed, become an end in itself. Its products are shut up in museums, to be viewed from time to time by gaping or perspiring multitudes. The artist dwells apart from the common activities of the people, a producer and a worshiper of an abstract product, which is as remote from real life as astronomy is from engineering. The fundamental defect of such conceptions is that, being abstracted from intellectual, from economic, from political activities of the people, they

stimulate no activities, hence do not contribute to the progress or survival of individuals or classes or nations. Whatever is out of relation to the active realities of life can appeal at best only to the select few, chiefly the geniuses, and the sentimentalists. The classes that find it necessary to struggle in order to meet their requisites for survival, such as lead to economic thrift, to resistance to the temptations that economic success carries in its train, to intellectual mastery of the sciences underlying professional careers, will endure such autotelic art instruction as they must, but will abandon its practice as soon as they can. This holds both of attempts to teach art appreciation and to impart artistic skill.

Is it not manifestly absurd to feed modern American children on romantic art, or any other form that is so remote in time and so foreign in conception as to be ages removed from any living interests of thought or action? Only a wholly erroneous idea of the origin and functions of art, and an equally delusive conception of the normal processes of education, can account for such wholesale efforts to reach undesirable ends by irrational methods. What rapture can we expect a healthy-minded boy to feel when he beholds a picture of the immaculate conception, or a modern girl when she sees a Madonna? The ideals embodied in a Madonna lie a thousand years behind the modern girl, while as a stimulus to art productivity the technique lies as far ahead. Not even as representatives of motherhood and infancy are these pictures effective, for it is not their purpose to represent these ideas. They do not inspire such wholesome delight in the mind of a child as that which arises even from a good picture of a brood of chickens or a basket of kittens.

Lacking the experience and historic background that can alone render such works of art intelligible, children can get only false or perverted fondness for them; and, even if understanding is present, these works of other ages, inspired by obsolete ideals, can no longer awaken a vivid interest in the beholder.

From every standpoint, therefore, autotelic ideas of art must be condemned when they fix the matter and method of the art in our schools, since they ignore development in art and in children, and since, being devoid of motives that lead to activity, that promote intellectual or economic or social survival, they are fit only for small esoteric groups whose leisure or profession or sentiment leads them to worship art for art's sake.

When it comes to acquisition of skill, I readily admit that it is possible for a good teacher to secure not a little in the absence of any adequate training in art appreciation. A gifted miss of twelve in one of our Ithaca schools, infinitely wearied with the art instruction, bored as much as a healthy child can be, so that she was in danger of acquiring a permanent disgust for drawing, was taken from the drawing class and put under the instruction of an artist in the university. Not only was the

lost interest restored, but very rapid progress was secured. Good drill here will develop skill in drawing, as it will in any other subject. Yet when we come to the masses of children, who must be taught by teachers who are not artists, and who teach art no better than they teach arithmetic or grammar, we come again to the imperative need of strong artistic motives. I have said enough, perhaps, if not entirely to convince you that such motives cannot be found in art regarded as an end in itself, yet enough at least to raise the question whether we can longer adhere to ideals that regard both subject and child as beyond the pale of the processes of development.

Having satisfied ourselves that autotelic art is false in theory and defective in practice, it remains for us to inquire how the fact of development in subject and child should influence the ends we should seek to attain, and the means whereby we may reach them.

Even a cursory study of the origin of art leads to the conviction that nowhere and at no time did art, as a thing apart from life, ever spring, Minerva-like, into existence. It has always been associated with some active struggle for existence, or other strong instinctive line of conduct. At times we associate the beginnings of art with play, then with warlike or erotic motives, then with primitive religion, often with things that promote the economic well-being of the individual or community. We note, moreover, that some form of feeling always accompanies artistic production or process, as in song and dance, in personal adornment, in artistic construction or arrangement.

From an economic standpoint, this feeling is the artistic satisfaction arising from the harmonious grouping of the elements of economic goods. This would appear in the manufacture of utensils, of implements of warfare, of articles of clothing or of food, of structures for shelter. The satisfaction of the savage in such harmonious arrangement of crude materials has developed into the refined artistic joy of the modern man in his home and its adornment, in his clothing and his food, and in the representations of his spiritual life. In the last analysis, however, the highest artistic pleasure finds its genesis in the harmonious grouping of the elements that have to do with his individual or class or national survival; hence with his important life-activities. Having its chief origin, then, in the things most important for living, we have an explanation of the fact that every great epoch of art has mirrored the age that produced it, not some other age with other ideals.

The genesis of art should show us, moreover, that our art education will be ineffective to the extent that it abandons the present and the vital for the distant and the fanciful or the sentimental. To some extent the development of the child follows that of the race, especially in the unfolding of its power to conceive, and in other respects it is a product of its own time. As a formal principle, the harmonious grouping of

goods or elements of goods will always produce æsthetic pleasure, but as a concrete principle the degree of this pleasure will depend upon the importance of the elements grouped. Interest will be warm, vivid, intense, in the things nearest to life; it will pale and grow cold as life recedes from the æsthetic object.

The conclusion, therefore, that irresistibly forces itself upon one is that art with children should be industrial before it is fine; the economic should precede the autotelic.

We are not devoid of intimations as to how the economic principle may be recognized in art instruction. An eminent authority in this field, lecturing last winter at Cornell, told the following incident: He had been for some time teaching art to a class of girls in a normal school. He had dwelt on the beauties of form and color, yet without producing the slightest visible effect upon their dress, which was in general anything but artistic. One day, however, he asked them if they would be willing to submit themselves one by one to the friendly criticism of the teacher and the class, to the end that the money expended on their dress might produce more artistic results. After some demur, they consented. Each girl in turn presented herself before teacher and class for comment and suggestion. Assuming the cost to be unchanged, the criticism concerned itself with style and fit, with color and arrangement, the personal peculiarities of complexion and form of each being taken into consideration. The result was that studies in form and color took on a new meaning, for they now assumed relations to life instead of being regarded as mere ends in themselves. The personal appearance of the young women underwent a rapid transformation, and the art instruction, formerly perfunctory, became charged with vital and personal interest.

In the Brooklyn Manual Training School the members of the class in domestic art at one stage of their work labor to produce an artistic hat. Each girl is asked to bring to school some old cast-off hat frame. This is first renovated and dyed, and then pressed into shape and trimmed with colored tissue-paper cut in bands from assorted sheets. Each girl, with the guidance of the teacher, the help of the mirror, and the comments of her mates, works at her own individual problem, which is to produce a hat which in form and color will be well adapted to her features, complexion, and clothing. As soon as a fair degree of success has been attained, the frame is trimmed with strips of some thin, inexpensive material, which comes in various colored bands, and which I believe is furnished by the school. Finally, when success has been attained, each girl purchases, with or without aid, a new frame and good materials for a hat, which, when completed according to the design already worked out, is worn by the maker.

Possibly some will not regard this as a form of real art. Autotelic it may not be, but it is economic, it is real, it is charged with artistic

interest, because, instead of being related solely to itself, it is related to a fragment of real life. Such art is concrete, not abstract. It recognizes that not even in art is heaven reached at a single bound. Does anyone fancy that this beginning might not also be the beginning of interest and power in drawing?

I do not urge the beneficial effect that such instruction would have upon millinery as a reason for giving it, but satisfy myself simply with the acquisition of a single vivid art motive.

In what manifold ways may we not similarly proceed? There are the color and cut and fit of garments for the older girls; there is the arrangement of pictures and furniture in a room in the schoolhouse dedicated to this purpose. It may be transformed now into a parlor, now a sitting-room, a dining-room, a bed-room, a kitchen; part of the furnishings being borrowed from house and store, and part being already at hand in the schoolhouse. A group of girls may be given charge each day, after a problem has been proposed by the teacher. When they have done as well as they can without assistance, class and teacher may be called in to criticise. Another attempt may then be made, the criticism being continued until comparative perfection of arrangement has been obtained. Again I refrain from urging the improvement in the artistic aspects of the home as the chief reason for having such exercises, but content myself with the gain in artistic motive. It is but a step from the study of effects in wall paper to artistic designing; from the critical arrangement of ornaments to their drawing or molding.

A part of the work described is fitted for boys. Many other equally good beginnings may be found in manual training, in miniature school gardening by means of large, shallow receptacles partly filled with sand. Indeed, every school of industrial arts, like the Drexel Institute in Philadelphia, or the Pratt Institute in New York, is a constant object-lesson in the acquisition of artistic appreciation and skill thru the harmonious grouping of economic goods.

When art finds its natural basis in the ways described, the road is open to more abstract forms. Next to the æsthetic feelings arising from harmonious grouping of economic goods, we may place, perhaps, the waves of artistic feeling to which children are subject, and which arise from real or fancied union with others or alienation from them.

* * * * *

My plea is simply that we begin at the right end; that we secure the most universal and powerful artistic motives in children by recognizing that art has had an evolution, and that children have a somewhat corresponding development. I call attention, moreover, to the fact that, of all the origins of art, the one whose elements are still most potent is the economic. Barbaric or savage warfare is no more; primitive erotic and religious feeling is transformed or finds no expression; but the

elements of economic goods are ever with us. Their harmonious grouping still has power to produce artistic pleasure even in the dullest minds. My argument goes to show that art instruction is now dominated by conceptions of art as an end in itself; but that this high potential abstraction, the deduction of generations of philosophers and art geniuses, leaves the art impulses of children cold and inert; and that, finally, if we would cure the prevalent art unresponsiveness in children, we must begin with the strongest art impulses that children feel—the happiness that arises from felicitous grouping of the things whereby they live.

DISCUSSION

PRESIDENT GEORGE GUNTON, of New York city, said that he was in full sympathy with the speaker. Art is not a thing in and for itself. It is a mistake to undertake, in any human institution or in any phase of human life, to establish anything in and for itself; for it is only as it comes in touch with human life that anything is of value. Art is valuable just in proportion as it broadens human life; hence, the farther art is removed from daily life, the less valuable it is.

Art, culture, refinement, taste, etc., begin on the outside and work inward. If we cannot get pure silk, we take silk with cotton back. Some people wear gloves before learning that hands and finger nails should be clean; but this even will help toward refinement, for the gloves will take them into society where they will soon learn that clean hands are a first requisite.

Art must touch us thru our appreciations, or it will be of no value to us. The idea that art should not be vulgarized is erroneous. Art that is of most value to the human race is commercialized and bears close relations to the daily environment.

MISS RODA SELLECK, Indianapolis, Ind., made a strong plea for art in daily life. She thought the time was near when the subject would find a place in every high-school course. She believed that manual training would do much to establish and cultivate the art spirit, and that the two subjects would prove to be mutually helpful in all their relations to human life.

EDUCATIONAL PIONEERING IN THE SOUTHERN MOUNTAINS

WILLIAM GOODELL FROST, PRESIDENT BERE A COLLEGE, BERE A, KY.

Friends and Fellow-Teachers:

Allow me to begin with a "true story," which is also a parable.

Berea's first teacher came to the mountains of Kentucky in 1855. The people had subscribed the necessary logs, but there were freshets and delays, so that when the "college" was finally completed, and fifty strapping young men and women enrolled as freshmen to begin the alphabet, only seven weeks remained before the instructor must return to his own college studies.

But the teacher rose to the occasion, and determined to give those young people something worth while in those seven weeks. He had no precedents, and he threw all preconceived notions to the winds. He sat up nights devising short-cuts, and sifted over all

the knowledge he possessed to find which was really of greatest importance. The pressure of that seven-weeks' course taught him to select and to invent. He boldly jumped the alphabet drew a cow upon the blackboard, wrote the name beneath, and launched out in a lecture upon the animal kingdom.

Results followed. The whole region blazed with educational enthusiasm, and when the seven weeks ended, his pupils could use the third reader, repeat the ten commandments and the law of love, explain the chief glories of America, and conduct a social gathering or a debating society with propriety.

This incident may well introduce the two errands which have brought me here this afternoon. The first is to remind you, and thru you the larger audience that follows the proceedings of this body, of the existence and value of the great uneducated masses of people that still linger in this age of light and privilege. The people who still live in log-cabins constitute a very important element in our nation. And my second errand is to suggest some of the educational adaptations which are called for in our attempts to reach our belated fellow-countrymen, and make them sharers in the best elements of modern civilization.

The largest body of uneducated Americans, the greatest mass of unprivileged people of our race anywhere in the world, is to be found in the southern mountains. But in describing them we shall describe a class which exists in greater or smaller numbers in all our states.

If we are to deal worthily with the belated and untrained people of America, we must approach them sympathetically and with consideration. They are not to be judged wholly by our somewhat artificial standards. We must appreciate their circumstances, and recognize their excellencies at the same time that we are bringing them new opportunities.

Probably the consideration which will most easily and certainly put us into a right attitude is the thought that these people are not a degraded people, but simply a people not yet graded up. Their speech, their customs, their ways of thought, are all survivals of former times. What they are today our own forefathers were a few generations back. Our families have had the opportunity to change and to progress, while their families have not. All these conditions are seen most clearly in the recesses of the southern mountains.

It is a far cry from McKinley back to Daniel Boone, but if you set your face toward eastern Kentucky, you may make that transition in twenty-four hours. The people of that vast region have been beleaguered by nature. Call up the map of our country, and you will see, grouped around eastern Kentucky and Tennessee, the mountainous backyards of the Virginias, the Carolinas, Georgia, and Alabama. Here is one of the grand divisions of our continent, which we are beginning to name Appalachian America. It embraces great varieties of climate, surface, and elevation, but as a place of human habitation it has one chief characteristic—it is a land of saddlebags.

And this means that it is a land of isolation. Passengers, messengers,

preachers, and ideas cannot travel as swiftly on horseback as by steamer, railroad, and electric cars. You can never know what isolation means till you have ridden with me a hundred miles up and down the beds of streams. After hours of solitude we reach a picturesque log-cabin, and behind it is a corn field so precipitous that they must prop the pumpkins to keep them from breaking from their moorings and rolling into the "branch." We may meet a man who will tell you, with a solemn drawl, that he has been "a leetle lame ever since he fell out of his corn field." And the children of that cabin, if they wish to see the world, have only the option of going up stream or down stream, where they will see other cabins and corn fields like their own.

A life of isolation is a life of deprivation. I remember the first time I rode into the mountains with my wife. We stopped for dinner some fifteen miles from home. Mrs. Frost was anxious to know whether she should see the woman of the house again — whether she came to Berea to trade, or went to Richmond, our county seat; and so she innocently inquired: "When you cannot get what you need at the little store down by the branch, where do you go?" The mountain woman smiled and said: "I go without." This "going without" leads to strange results. It seemed barbarous to find the people burning grease lamps with a floating wick, or using kerosene lamps without chimneys.

But consideration shows that it is a delicate matter to carry a lamp chimney on horseback over twenty miles of mountain road, and we concluded that if we lived *where* they do we should live very much *as* they do.

We do not pity them for the lack of lamp chimneys so much as for the lack of other means of illumination, such as schools and churches. In religion the people have really degenerated, and lost the great Protestant idea that a minister should be an educated man. These preachers are, many of them, good men, but they have not yet ceased to debate such questions as whether the world is flat or round, and whether the Southern Methodist or the Missionary Baptist is the only true church. Not long ago two of our college students were carrying on a Sunday school near Boone's Gap. A native preacher ministered there once a month, and learned from our students that his next appointment fell on "Easter Sunday." He was too proud to ask what "Easter" meant, and searched his Bible in vain. When the day came he preached upon Queen Esther.

But the most interesting thing about our backwoods cousins is the survival of ancient words and customs among them. You notice it first in their speech, which glitters with Shakespearean English and Anglo-Saxon. The past tense of "help" is *holp* in the mountains, and we have the strong plurals like "postes" and "beastes." And it is well to remember that, while we are interested in all these queer things about the mountaineer, he is just as much interested in the queer things about us. On one occasion they had adjourned court to hear me lecture on education, and I spoke

to some two hundred men, not one of whom wore a collar. After the speech a man with a big voice said to me : "Wall, stranger, I could understand right smart of what you were telling us. Ye see, we had an officer in eour regiment from New York or sum such part what *spoke the same dialect as you do!*"

With the speech of colonial times they maintain many of the arts of colonial times. I, for one, stand with respect before the loom and spinning-wheel. No woman in this assembly can spin. Our mothers had already forgotten the art. But our grandmothers, and our foremothers for a hundred generations, have been spinners. The dexterity of our young girls in piano-playing and china-painting comes from the deft fingers that once twirled the thread.

The mountain people are hospitable, patriotic, religious ; and if they are much addicted to killing one another, that is only another honest survival of Saxon temper. In a word, these people are "our contemporary ancestors."

This mountain region contains three million people, about two million of whom are living in the primitive conditions described. And, as we have before remarked, there are people of this class and condition, more or less numerous, in all our states. The mountain condition is the country condition intensified. In all the South where there is not the isolation of mountains there is the isolation of distance and a sparse population. Do we need to pause to argue the significance and value of our rural and mountain population? Here are the giant forms that can accelerate the nation's industry, and the unjaded nerves that can steady the nation's thought. Here is American stock, only needing the motive and the guidance which elementary education can give.

It is not for me in any single address to point out all the adaptations necessary in bringing education to such people. But it may be of value to call attention to the fact that there must be adaptation. There is danger that the problems of the city schools may divert attention from the equally important work of the rural districts. The methods of the Boston Latin School will require some modification when applied to the children of a moonshiner in North Carolina—children virtually living in the seventeenth century!

Our methods must be characterized first of all by patience. Our pupils are not to blame for not knowing what nobody has told them. A recent text-book in German was adopted in Berea because of this sentence in the preface : "It is impossible for the author of a text-book to overestimate the ignorance and stupidity of the learner—let him take nothing for granted." We owe them courses of instruction so planned as to produce some immediate results. For each unit of effort these beginners in education should receive a distinct reward. They have a right to an unusual proportion of the practical. They are perishing for

lack of knowledge upon ordinary affairs like hygiene, agriculture, and the conduct of business. Of course, the teacher who is to be their friend in these matters must be a superior and an enterprising person.

Our plans for them must embrace more than the schoolroom. There must be a certain education for the parents before we shall have their full co-operation. There must even be an education for the school trustees and school superintendents. Necessarily thruout the South today the public school is largely administered by men who did not come up thru the public school themselves, and hence are hardly yet in fullest sympathy with it. It is here that private benevolence finds its place, in funds like those bequeathed by Peabody, Slater, and Hand, and in institutions like Berea College, which spends an eighth part of its income in extension work in the remote districts.

The great battle in the United States today is not to push the forward column, but to bring up the belated detachments at the rear. If I were the United States commissioner of education, I would concentrate my efforts on the backward states. If I were a state superintendent, I would devote my energies to the lagging counties. If I were a county superintendent, I would spend my time in the poorer districts. If I were a country-school teacher, I would look up the most unenlightened families in my district.

Let me invoke, then, a larger appreciation for the country-school teacher. It is he who must "identify" the "lad o' pairts" and put him on the way to wider usefulness and honor. It is he that must adapt and invent and make himself into a whole faculty. It is he that will take the dry seed learning of the books and scatter it among the people where it may become fruitful.

American education runs too much to tops. Everybody is ambitious to be teaching advanced courses. The third-grade teacher counts it a promotion if she may be set to teach pupils a year older in the fourth grade, and the college instructor will give up his class of fifty lusty boys and girls in Homer in order that he may teach three or four dreary specialists in Sanskrit. It is all a mistake. Education is the formation of character, and this is accomplished most effectively in the earlier stages of the process. The Germans know this, and men of genius there give their lives to the work of elementary education.

What is "higher education"? If by that term you mean the education that requires the longest time and the largest expense, then the universities monopolize it. But if "high" means dignified, important, weighty, momentous, then the highest things in education, the things that minister to soul-welfare and the happiness of the pupil and the community, these things must be crowded into the elementary courses.

It is cheering to find how the people of the mountains respond to education of the right kind. I love to recall the capture of my first

moonshiner. I was lecturing at the little schoolhouses, and the people began to tell me of a mighty man whose dominions I was approaching. He had built his log castle at a point where three counties joined, so that on occasion he could move rapidly from one jurisdiction to another. He had killed a neighbor here and an officer there, and, in the jocular phrase of the mountains, "had so much lead in him he dassen't go in swimmin'." This distinguished individual attended my lecture and listened with rapt attention. Evidently the subject of education was new to him. He followed me up and heard the same speech over again in the afternoon. The next day, as I came up to my schoolhouse miles away, there was his familiar gray horse fastened to the hanging limb of a beech tree. He heard that speech for the third time, and the result was that he closed his still, moved with all his "plunder" to Berea, and put five children in school—the eldest being already in the penitentiary. That family was interrupted just in time.

The typical backwoods boy was Abraham Lincoln. He differed from his neighbors in that his mother had six books. Without that ray of education his great soul would have been strangled at the birth.

Lincoln has hallowed the log-cabin, in a way, as Christ hallowed the manger. And I can never pass one of those humble dwellings without thinking of the possible Lincoln that it holds, and stiffening up my resolution to do all that in me lies to put some educational light into every mountain home.

EDUCATION AND CRIME

AMOS W. BUTLER, SECRETARY OF BOARD OF STATE CHARITIES OF
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Many a time I have seen a farmer cleaning wheat for seed. One such occurrence comes plainly to my mind. The floor was cleared; the fanning mill was brought out; the slides, shakers, and all other parts were adjusted; the wheat was poured into the hopper, and the gates were opened as the fan began to turn. Apparently all was going well. Shortly one observed that the amount of seed-wheat coming out of the front of the mill was not what he thought it should be. Examination showed that many perfect grains and many more that were plump, but undersized, were passing thru the wrong channel. These, with the grains that were shriveled, crushed, or otherwise defective, were going into the box under the mill with the cheat. Upon investigation it was found that one of the riddles had been put in wrong. This was adjusted, and when the mill started anew all the large, perfect grains found their way to the seed-wheat pile. The smaller grains, tho plump, would pass

thru the riddles and find their way to the cheat box. Another riddle or a different adjustment of the shaker would have separated them for merchantable wheat; but they were not good enough for seed. Often, when I am in a reformatory or a prison, I think of those who are serving sentence there as persons who, in the fanning mill of life, have fallen into the cheat box. Possibly there is some reason for it. If so, the cause may be found, and that which is wrong righted. I think that some of these young men are dwarfed, shriveled, or misshapen grains thru some human fault; that they are crushed and shattered thru some improper adjustment or arrangement of the machinery.

It is well to stop at times and review the past—our own and that of those around us—so far as we can be accurately informed concerning it. By such retrospection we see the crooked places in our trail—the irregularities of our lives, the mistakes of our living. From the things we see, if we are wise, we can better guide our future course.

I have seen a miller go to the spout in the mill, lift the cloth, and bring forth a handful of flour. By sight and feel he judges whether the product is of proper quality. At the end of the milling process he is able to tell whether anything is wrong; if so, what; and promptly to adjust the machinery that needs it.

It might pay us to stand at the spout like the miller; to note the quality of the product of life's mill, with its continuous grind. Thereby we might learn what, if anything, it is that is wrong. Having such knowledge, we might apply our best efforts to its correction.

With Pope we are coming to believe "the proper study of mankind is man." In this study we include all men, the normal and defective, the successful and the unsuccessful. Frequently we learn more from our failures than from our successes.

The Indiana board of state charities has supervision over all state and local charitable and correctional institutions that receive any support whatever from the public funds. For several years it has been collecting information concerning the defectives, dependents, and delinquents of the state. Blanks have been prepared for each group of persons, giving all that can be learned of the important events in the personal and family history of each individual. These relate to his nativity, personal defects, family surroundings, training in childhood and youth, associates, habits, and other related facts. The information collected is transcribed to a double card registration. One set of cards is arranged alphabetically, the other by institutions; one is a duplicate of the other. From this it is possible to tell who are the inmates of Indiana's institutions and who have been cared for therein since the registration began.

Dr. W. W. Folwell, ex-president of the University of Minnesota, and a specialist in sociology, has recently stated that this is the best system of records in use by any state. Unfortunately the board of state charities

has been hampered in its work by lack of funds. For this reason the valuable data in its office have not been worked up and studied. From time to time, as opportunity offered, studies have been made of a certain number of cases. Among these have been a few groups of inmates of the Indiana reformatory at Jeffersonville. That institution receives young men, principally first offenders, between sixteen and thirty years of age.

Recently, for a special purpose, a short study was made of certain points regarding the last five hundred inmates received up to and including May 31, 1901. The facts brought out verify in a striking way those of previous investigations. It is generally recognized that the family relations of a majority of the inmates of such institutions have been disturbed. One or both parents are dead, or they live apart. Their children have not had the benefit of proper home training. The largest proportion are notably deficient in education. Of the 500 studied, 66, or 13.2 per cent., are reported as illiterate; 251, or 50.2 per cent., had not reached the fourth grade in the public schools; and but 26, or 5.2 per cent., had reached the high school; 282 of all noted were natives of Indiana. The proportion of illiteracy was less in these by almost one-half, and a greater number had passed the elementary-school work. To be more specific, of those last mentioned, 22, or 7.8 per cent., were illiterate; 123, or 43.6 per cent., had not reached the fourth public-school grade; only 13, or 4.6 per cent., had reached the high school.

The stooping shoulders, awkward arms, and shambling gait of these young men indicate plainly that they are deficient in physical training. The training of the hand has been neglected; 406, or 81.2 per cent., claim to have no trades. In these busy times when there is demand for workmen, 252, or 50.4 per cent., state they were unemployed when the crime for which they were sentenced was committed. Not one claims to have been under the influence of good associates. Evil associates lead to bad habits. While it is not claimed that those shown were the cause of crime, it is interesting to note their relationship to it. Three hundred and twelve, or 62.4 per cent., use liquor; 374, or 74.8 per cent., smoke cigarettes; 409, or 81.8 per cent., use tobacco in some form. On the contrary, it is shown that they have not been to any very great extent under those influences which are considered refining or helpful. Many have been deprived of proper home influences. Two hundred and eighty-six, or 57.2 per cent., have not attended Sunday school. Only one of the 500 examined claimed to have belonged to the Y. M. C. A. It should be stated here that no value is claimed for some of these latter figures. I do not know that it will be shown that they have any value. They are simply taken for purposes of experiment in order that they may be tested.

The offenses committed by these 500 persons may be classified as crimes against persons and crimes against property. It will be observed that 88 per cent., 440, of them fall under the latter class, leaving 12 per cent., 60,

under the former. As has been intimated, this is but a tentative presentation of this subject. Similar studies have been made with substantially the same results. One is impressed that there is something notably lacking in these young men. They lack home training; they lack mental training; they lack physical training; they lack manual training; they lack moral training.

The striking need is the training of the mind, the morals, and the muscles. It is the effort of our reformatories, so far as they can, to correct these deficiencies, and in addition inculcate self-control. That they are doing a good work is shown by their histories. This is the work of reclaiming the fallen. Why not train properly those who have not fallen? What can we do that has not been done for the prevention of crime? That is the word for us to remember—"prevention." "An ounce of prevention is worth a pound of cure."

Does it not impress you that something may be wrong with the present attitude and efforts of the home, of the school, and of the church toward the young? Can we not stand at the end of childhood, where the grist comes out, and learn something? Is there not something in the facts that appeals to you, teachers, whose lives are devoted to the elevation of all childhood? Shall that not cause us to question our theories, our methods, and our results?

The last quarter of a century has witnessed notable changes in the treatment of the young who have committed crime. The ten years just closing have been especially conspicuous in this way. Indiana has endeavored to keep pace in this work with the more progressive states. Not long since one of our most experienced penologists, a resident of an eastern state, said to me: "I have watched with pleasure the progress of Indiana's institutions in the last few years, but that which has interested me most has been the laws that you have passed that will be preventive of crime." We then spoke of the child-saving law, the child-labor law, the compulsory-education law, the board of guardians law, and of the curfew ordinances. It was recalled that the administration of almost all of these measures was under the supervision of one central board. As we realize that these laws for the protection of unfortunate childhood, of the orphan or ill-treated child—those requiring school attendance, those for the regulation of children at night—all strike at some of the causes of crime, we feel the force of his remark. How efficient they will be depends upon public intelligence and public sentiment. If our people know these things, will they not do them? In addition, two great factors in the proper training of the young are beginning to make themselves felt. They are manual training and physical culture.

I have been asked how I believed existing conditions would be helped. My reply has been that the work will first be taken up by our schools. They represent an organized force, active and alert for every

advance. Next the churches will give it their attention. Finally, thru the influence of both of these and of charity organization—a proper place for uniting their efforts—the homes will be reached. These are the social unit, and the message will come to them one by one.

When the school, the church, and the home shall fully understand the facts, and the urgent need for renewed effort along every line that may possibly be used to save the boys and girls, the figures will have a different story to tell. I have faith to believe that this result will be accomplished. In my own state I feel that it is working with mighty power now. I have great confidence in our people. I have faith in men and women. I believe in you teachers who are called upon to teach the children of the people. With such faith I need not assure you that I expect our children to get much more than their parents received. I expect them to be better than their parents. What I expect for my own children I expect for all children.

DEPARTMENT OF SECONDARY EDUCATION

SECRETARY'S MINUTES

FIRST SESSION.—WEDNESDAY, JULY 10, 1901

The Department of Secondary Education met in Room 230 of the Central High School, and was called to order by the president, William J. S. Bryan, principal of the high school, St. Louis, Mo. In the absence of the secretary, the vice-president, Miss Nettie Fillmore, of Cincinnati, was called upon to act as secretary.

Music—vocal solo, (a) "Villaneth," *Del Acqua*; (b) "Song of Sunshine," *Goring Thomas*—by Miss Gertrude Loder.

The president delivered a brief introductory address, after which he introduced J. Remsen Bishop, principal of the Walnut Hills High School, Cincinnati, O., who spoke on "The Function of the High School of Today."

Discussion of Principal Bishop's address was opened by Stratton D. Brooks, high school visitor of the University of Illinois, Champaign, Ill.

Following the discussion the president appointed the following Committee on Nominations, to report at a special business meeting to be held at 2 P. M., Friday, July 12:

F. P. Moulton, Hartford, Conn.

J. H. Harris, Orchard Lake, Mich.

F. W. Barrows, Buffalo, N. Y.

The department then adjourned to meet in the various rooms assigned for round-table conferences in accordance with the following program:

English Conference, Auditorium; leader, J. H. Harris, principal of the Michigan Military Academy, Orchard Lake, Mich.

Latin Conference, Room No. 311; leader, F. P. Moulton, instructor of Latin, High School, Hartford, Conn.

Commercial Studies Conference, Room No. 118; leader, Thomas H. H. Knight, Girls' High School, Boston, Mass.

Botany Conference, Room No. 217; leader, Lewis Murbach, teacher of biology, Central High School, Detroit, Mich.

Chemistry exhibit, Room No. 4; physics exhibit from St. Louis, Room No. 117.

SECOND SESSION.—THURSDAY, JULY 11

The department met at 2:30 P. M.

Music—vocal solo, "Staccato Polka," *Harshell*—by Miss Lois Inglis.

An adjournment was then taken to the various round-table conferences in accordance with the following program:

Zoölogy Conference, Room No. 217; leader, Franklin W. Barrows, teacher of zoölogy, Central High School, Buffalo, N. Y.

Domestic Science Conference, Room No. 302; leader, Miss Abble L. Marlatt, teacher of domestic science, Manual Training High School, Providence, R. I.

Algebra Conference, Room No. 311; leader, George W. Evans, teacher of mathematics, English High School, Boston, Mass.

Greek Conference, Room No. 307; leader, Isaac N. Judson, teacher of the classics, St. Louis High School, St. Louis, Mo.

German Conference, Room No. 301; leader, Joseph Krug, teacher of German, Central High School, Cleveland, O.

Physics Conference, Room No. 217; Carl J. Ingerson, teacher of physics, High School, St. Louis, Mo.

Round-table discussions on secondary studies, 4:30 P. M.

Chemistry Conference, Room No. 9; leader, C. E. Linebarger, teacher of chemistry, Lake View High School, Chicago, Ill.

Geometry Conference, Room No. 218; leader, Alan Sanders, teacher of geometry, Hughes High School, Cincinnati, O.

History Conference, Room No. 230; leader, James J. Sheppard, head teacher of history, DeWitt Clinton High School, New York, N. Y.

Physiography Conference, Room No. 212; leader, William H. Snyder, teacher of science, Worcester Academy, Worcester, Mass.

Physiology Conference, Room No. 212; leader, James E. Peabody, teacher of physiology, Cooper High School, New York city.

French Conference, Room No. 305; leader, Charles M. Gubus, teacher of French, Central High School, Detroit, Mich.

NETTIE FILLMORE,

Acting Secretary.

THIRD SESSION.—FRIDAY, JULY 12

A business meeting of the Department of Secondary Education was held in Room 230 of the Central High School at 3 P. M. The meeting was called to order by President William J. S. Bryan.

In the absence of the secretary, J. H. Beazell, principal Central High School, Detroit, Mich., was appointed secretary *pro tem*.

The first business was the report of the Committee on Nominations, which was as follows:

For President—J. Remsen Bishop, principal Walnut Hills High School, Cincinnati, O.

For Vice President—W. F. Webster, principal East Side High School, Minneapolis, Minn.

For Secretary—Miss Clara A. Pease, High School, Hartford, Conn.

The secretary was instructed to cast the ballot in favor of the nominees, and this was done. The president then declared the above-named elected as officers of the Department of Secondary Education for the ensuing year.

The following resolution was introduced by Mr. C. F. Adams, Central High School, Detroit, Mich., and adopted by the department:

WHEREAS, A recent ruling of the appraiser of the port of New York, relative to the importation of scientific apparatus, duty free, for the use of schools and colleges, has so changed the previous classification as greatly to limit, if not entirely prevent, such importation; and

WHEREAS, We believe such ruling is not in conformity with either the spirit or the letter of the law and seriously cripples the work of the scientific departments of our schools;

Be it resolved, That we, as representatives of the teachers of science of the United States, enter our earnest protest against such ruling as working a hardship to the educational interests of the country, and respectfully request that it be reconsidered and, if possible, changed. Be it further resolved that this protest and request be forwarded to the secretary of the treasury of the United States by the Secretary of the National Educational Association.

(Signed) CHARLES F. ADAMS, Central High School, Detroit, Mich.,

Chairman of Committee.

A. W. AUGUR, Lake View High School, Chicago, Ill.

HERBERT C. WOOD, East High School, Cleveland, O.

A resolution was offered tendering the thanks of the department to the principals and teachers of the Detroit high schools, and to the local committee, for the work done by them to make the meetings a success.

The last business was a vote of thanks to President William J. S. Bryan, and the other officers of the department, for their efforts in the way of preparation for the meeting and for the successful execution of the plans.

The meeting then adjourned.

J. H. BEAZELL,

Secretary pro tem.

PAPERS AND DISCUSSIONS

OPENING ADDRESS OF PRESIDENT

WILLIAM J. S. BRYAN, PRINCIPAL HIGH SCHOOL, ST. LOUIS, MO.

In the report of Commissioner William T. Harris for 1898-99, chap. xli, there are some interesting and suggestive statistics with reference to the growth of secondary schools in the United States, which seem to show that the people of this country have decided that it is necessary to provide for the education of the youth of the land, at least to the limit of secondary studies. This report is the more encouraging because the growth has been most marked in the number of public secondary schools. Certain portions of the community always have regarded some form of secondary education as essential, because it afforded the preparation for higher education and the means of entering college; but now the people as a whole evidently have settled in their own minds that the advantages of secondary education to the individuals who receive it, and to the community that profits by the increased power and usefulness of the recipients, are such as to make it imperative for progressive communities to provide the necessary facilities for imparting such education to those who are prepared and disposed to take it. The community that in the future fails to see the signs of the times relative to the education of its youth will inevitably be outstripped in the race for development, wealth, and power. With more than seven thousand five hundred schools, educating over six hundred thousand pupils in secondary studies, and sending forth annually at least one-tenth of that number as graduates to contend for the improvement and further extension of the education offered to the youth of the nation, no backward step need be feared or would be tolerated. The battle of secondary education has been won. Indeed, there is every indication that men everywhere are convinced of the value and the imperative need, not only of secondary education, but of education with only such limitations as the spiritual and intellectual endowment of the individual imposes. Sporadic instances of opposition to the maintenance and support of secondary schools no doubt will occur, and some districts, infected with ignorance and incrustated with prejudice, may refuse their support for a time, but the general discussion and questioning of the use or need of public secondary education would seem to be things of the past, not to be renewed or revived. It is remarkable that in ten years the number of public secondary schools should have increased 117 per cent., and the number of pupils enrolled in them 135 per cent., or from 204,982 to 580,065. Still more significant is this increase when we consider that it is not at all explained by the increase in the population.

The percentage of pupils of secondary schools to the population increased from .335 per cent. in 1889 to .784 per cent. in 1899. This growth is prophetic of future advancement in education, and may well gladden the heart of every lover of his fellow-man. The sovereign people has spoken, and in this case the voice of the people is truly the voice of God: "Let there be light." "Ye shall know the truth, and the truth shall make you free."

The thought, the fear, the dread of inhibition or retrogression may now be dismissed, and the energy, the determination, the devotion heretofore expended in establishing and maintaining the right of the youth to secondary education may now be employed in devising improved means for the development, stimulation, and nourishment of those who present themselves for instruction and training. Secondary schools will no longer be engines with 20 or 25 per cent. of effective power, but dynamos with only an inconsiderable waste of force.

The age of high-school pupils is most critical. Their proper guidance and direction require the utmost tact and skill. In these years, from fourteen to eighteen, the vital energies are most active. The currents of life course warmly and rapidly thru the veins; the entire organism hastens toward maturity; the buds of promise are unfolding into the flower of manhood and womanhood. In stature the boys and girls often are already men and women. The desire to assert their individuality and to assume the prerogatives of maturity throbs in every youthful heart. Exuberant vitality, abundant strength, buoyant hope, determination untempered by experience of difficulties, make the young men and women impatient of restraint, because confident of wisdom and power. Ignore the conditions, and the problem of secondary education fails of solution; see them, recognize them, comprehend them, act in consistency with them, and the problem becomes most fascinating, not because of its simplicity—for it is very complex—but because of the possibilities involved in its solution. Have you ever platted a curve from its equation, and traced with astonishment and delight its evolution? Have you ever stood almost in awe and watched the marvelous unfolding of some exquisite moon-flower? Have you seen its petals tremble as with a consciousness of its blooming? Have you beheld it suddenly spread itself out before your wondering eyes in its perfection of beauty? Not nearly so wonderful or impressive is this sight as is the vision of boys and girls developing, growing into manhood and womanhood, before the eyes of the teacher who is in love with his work; the preparation thru instruction and discipline of strong, noble, forceful, beneficent manhood, and gentle, pure, resourceful, gracious womanhood, from the potential characters of his pupils.

In the brief time at my disposal I may not hope to tell how the possible can be made the actual; and were time unlimited, I could not

tell how individual cases should be treated or special problems may be solved. But of this I feel assured: the educator of boys and girls, who in their own estimation and in the estimation of the well-informed teacher are young men and women, must be a leader, not a driver; he must excite their admiration, inspire their confidence, and kindle their enthusiasm; he must be large of heart and strong of mind; a manly man, whose knowledge of the subject taught is such as readily to command the respect of his pupils, and whose character makes a personal appeal to the best that is to be found in the pupil; who must be brought to realize that the consciousness of freedom is attainable only thru the comprehension and sincere approval and willing observance of the laws that condition his life as a rational, social being, and inhibit all unreasonableness of conduct. The methods of such an educator will be hopeful, sympathetic, helpful, intelligent, judicious, discriminating, faithful, individual. Confidence on the part of the educator in the ultimate result of his efforts will create in the pupil the condition precedent to such an end. Doubt of success will paralyze effort and is quickly communicated from teacher to pupil; and when both are fettered by it, further progress is impossible. Between the teacher and the taught there is ever the strongest bond of sympathy. The needs, the aspirations, the defects, the dormant but awakening powers, appeal with irresistible pathos to the teacher, of whom it must be true, as it was of the Great Teacher: "A bruised reed he will not break, the smoking flax he will not quench." Without this kindling sympathy teaching is soulless and impotent. Of all pupils those in secondary schools are most easily discouraged, and most quickly become disgusted with school life unless it is instinct with human interest. Horace Mann's comparison and contrast of the physician and the teacher in their attitude toward patient and pupil is most suggestive. Not they that are whole, but they that are sick, have need of a physician. For the physician to complain that his patient is sick and needs his utmost skill is not more unreasonable than for the teacher to find fault with the pupil who needs instruction and discipline, forgetful that, were there no need of instruction and discipline, the teacher's occupation would be gone. The privilege of being helpful is the chief attraction of the teacher's vocation.

There is, however, need of information, if the teacher is to be truly helpful. A knowledge of symptoms and of the various conditions indicated, acquaintance with remedies available, and familiarity with methods of treatment are essential. These are the general equipment of the educator, but for the production of the desired effect there must be discrimination of the special conditions and a judicious use of means at command. The adaptation of method to the individuality of pupils, of which we hear so much, is not a new discovery, but the practice of all successful teachers. The indolent, the indifferent, the ignorant teacher, the hireling, doubtless has treated the pupils who were so unfortunate as

to be in his charge as tho they were all alike, but the educator has never lost sight of the personality, the individuality, of his pupils. In the pupils of secondary schools the differentiation of character is even more marked than in younger pupils, and the sense of maturity more conscious, and the need of individual treatment more insistent and imperative. This does not mean that the teacher is to cease to be an educator and become a chairman or a chaperon. It does not mean that he is to turn over the direction of affairs to those whose judgment he is to form and mold. It does imply that the educator must be a student of human nature and of the special pupils in his charge, that he may adapt his art to the particular subject treated.

Teachers of secondary schools, the requirements are exacting; the work demands the noblest native endowments, supplemented by the broadest preparation, the profoundest study, the deepest devotion. But we labor for an ample reward, the great result to be achieved, the perfecting of manhood and womanhood in the lives of our pupils.

THE FUNCTION OF THE HIGH SCHOOL OF TODAY

J. REMSEN BISHOP, PRINCIPAL WALNUT HILLS HIGH SCHOOL, CINCINNATI, O.

[AN ABSTRACT]

Socrates, the greatest of teachers and of disputants, apparently felt that the chief end of his *elenchus* was attained if he arrived at a definition. The definition he sought and toward which he remorselessly drove his interlocutor was not one that merely satisfied preconceived opinion; it must be one that, subjected to the severest examination, no available argument could successfully assail. No readier method suggests itself of determining the true function of the high school than that of examining some of the current definitions of that institution. The analysis necessary to this process may at least bring into view some of the material upon which ultimately a true definition will be based.

Of the more or less vague definitions of the public high school that pass current in the thought of the people is the one that it is successor to the rights, privileges, and benefits of the old academy of New England and the middle states. It would be historically gratifying if the old academy could, phoenix-like, live again in the modern high school. Nor is there anything very harmful in this definition, illusory tho it be, if there is not at the same time an implication of moral obligation on the part of the high school to perform chiefly, or at all, the particular work of the prototype.

Primarily designed to put young men in training for the ministry, the law, or at any rate for college, the scheme of the New England academy was naturally to a preponderating degree classical. With perfect loyalty

to its traditions, it was slow to welcome new subjects, was itself without initiative, and clung to as narrow a program as the demands of the colleges permitted. Of somewhat the same character were the private schools of the western cities in the middle of the last century. That these private academies were forced to yield their ground to some extent to the public high school, that later made its appearance as an advance of the public-school system into the domain of secondary education, was due to the rapid and peculiar development of this new factor in education.

Was the high school to be practically the old New England academy, differing chiefly in the fact that its tuition was free of cost to all children of citizens? When the public occasionally grew skeptical regarding the real benefit of the schools to any very large number of children, and demanded the introduction of so-called practical branches, there was a temporary yielding to the demand. Subjects of study that had become factors in modern civilization within the memory of living men were introduced, tho reluctantly. When the partially elective system was introduced, the high school ceased to be the old academy of single but narrow aim. For good or for ill, it became a profoundly different institution.

A few years ago it was a habit of speakers addressing assemblies of school-teachers to refer to high schools as the "people's colleges." For two reasons this definition appears to be unsound. At least the general aim of the college is the pursuit of learning for learning's sake, with no utilitarian purpose that cannot be accomplished without sacrifice of the broad nurture of the intellect. Universities supported at state or municipal expense may be maintained for this purpose; the high schools are not, except as they incidentally furnish the foundation for advanced study.

The pupils of the high school are neither old enough nor intellectually sufficiently trained to do what all will agree is true college work. The best colleges of law, medicine, and theology would now receive a man or woman without a college training, or its equivalent, only upon evidence of extraordinary fitness to profit by their courses; and the day will come, if present tendencies continue, when a professional school with lower entrance requirement will be outclassed. It would be an injury both to the high school, in its proper sphere, and to the college, if the people should regard their high schools as colleges.

Again, the high school, from another and more comprehensive point of view, has been considered the connecting link between the primary school and the university in a grand system of education offering to every boy and girl of this free land, at public expense, the completest education which he is capable of receiving. The only objection to this definition of the high school is that it disregards certain facts. In 1889-90 the per cent. of public high-school students preparing for college was 14.44, and

in 1898-99 only 11.5. In other words, relatively more students are now found in our high schools with the purpose of going to work at the end of their course or sooner. Those who would make the connecting-link idea paramount in the fashioning of the high-school program should give this condition due thought.

There is a growing sentiment that the high school should be in a real and practical sense distinctively a preparatory school for men and women who are to enter at once into the industrial life of the community. The alarmingly small proportion of boys in some high schools, as compared with the number of girls, is adduced as testimony tending to show that parents wishing to start their sons promptly in practical life either set them at work prematurely or send them to schools which, if inferior in certain regards, still offer a definite training for some paid social service.

There is another and very serious aspect of this question. While our communities were rapidly growing and developing, there was an ever-ready popular assent to enterprises at public cost. The process of a vast host of civilized people settling themselves in a new land has been hugely expensive, and the high rate of taxation, bordering perhaps on thirty dollars to the thousand, is becoming a disturbing element in politics. Naturally the levy for the support of the public schools, which, at a venture, may be called a seventh of the whole, suggests itself for curtailment. The high schools, being in a certain sense select schools, apparently of benefit to only a portion of the youth of school age, offer an obvious point of attack. Put upon the defensive, high schools in these communities must make good the title to existence of each of their departments by an appeal to the judgment of the people. The result will be simply that the schools will be reorganized so that a large portion of their function will be giving their students training adapted to prepare them for ready entrance into the communal life, while a margin will still continue sacred to the intellectual treasures of the race. The schools will have won in the contest if, whatever the change in the material of their courses, they teach whatever they do teach in a broad spirit, with devotion to underlying truth and a resolute rejection of mere surface work.

Signs of this new development—or perhaps it might better be called this alteration—of the public high-school scheme are all about us. The entering wedge may have been the division of the course into two courses. Then followed a liberal application of the principle of election of studies.

So far, there has not been of necessity any change in the studies offered. The pupil could avoid subjects not entering his individual scheme, but his choice was still confined to subjects not at all or but slightly connected with hand- and eye-training, and quite as far away from immediate application to the doing and making activities of modern life. From this stage the development has been slow. It might *a priori* be inferred that changes of material and method would be frequent. Too

rapid change and insufficient consideration might well be feared. On the contrary, the ordinary American school board is found to be in an attitude of suspicion, if not of actual hostility, with reference to making important changes, especially such as involve new ideas or the application of well-known educational means for the first time in any particular place.

When it was first proposed to introduce shop-work into the secondary-school system, objection was made on two grounds. It was pointed out that the time allowances of the existing branches was hardly adequate; that to put anything more into the course without removing something already there meant less thoro work in everything, and there was already complaint on that score; that what was really needed was a decrease in the number of studies already in the course, and greater thoroness; that there was now too much of a mere smattering of knowledge of many subjects, where there should be thoro mastering of a few. The other objection seems to have rested upon the notion that there was something intrinsically less educative in handwork, and that to give it equal place with the old humanities, and even with the modern sciences, involved a lowering of standard, a downward step in education, and an unworthy concession to the commercializing tendency of the age.

That we best learn to do by doing will be accepted as a truism by all here today. That man will reach his highest development who has had opportunity to employ his natural talents to produce, after gradual improvement, the best he is capable of producing. Certainly the hand can do nothing without the aid of the brain, and the craftsman talent, if I may call it such, may be the pivotal talent in the individual, around which his other talents must revolve if the result is to be lastingly efficient. The idea that manual training, as understood and offered today, involves anything ignoble is nonsensical. A great loss to countless boys and girls has resulted from its tardy introduction. Its relegation to separate schools is perhaps only a temporary stage in the process of general introduction.

There is another class of subjects intimately connected with the function of the high schools, viewed as schools for all the people, that is but just now receiving serious attention. About us there has grown up a vast structure of industry, of making and exchanging things, which exerts a vital influence upon every one of us. Today the man must learn to be good in the midst of affairs, to be sufficiently public-spirited to interest himself earnestly in politics, to be wise and generous in his business. Chemistry and physics as applied to manufacturing, the machinery of government, business management, and the methods of banking and exchange correlate much in modern life. It is possible to construct textbooks and to teach these subjects in such a way that no one studying them would derive anything but theoretical knowledge. But those who

contend that the function of the high school is primarily to prepare youth for immediate social service boldly assert that applied chemistry and physics should be taught with constant reference to the student's entering the commercial laboratory and the shop; civics, with a view to his knowing the practical working of the local, state, and federal government; business matters, as actually employed in the business establishments of the community, with the practical adjuncts of stenography and typewriting. The movement to include these subjects grows apace even where no beginning has thus far been made.

Concerning chemistry, physics, and civics it is not necessary for this paper to enter into details, but a reason should perhaps be given why the present state of business training in the high school is believed to be encouraging. The high school, the people's school for youths between the ages of approximately fourteen and eighteen, ought, it would seem, to give as useful a preparation as the "business college" and the correspondence school. The material for a suitable high-school business course is now shaping itself.

In response to a series of questions, Dr. Cheesman A. Herrick, of the school of commerce of the Central High School, Philadelphia, Pa., states that he regards "a business course liberally conceived and wisely inaugurated as a legitimate part of secondary education, and deserving to rank with manual training or the classics. Its establishment is indispensable if secondary education is for the whole community."

Thus the high school will not only send into the business world boys and girls equipped for work, but will send on to the university or school of technology such as develop ambition to become masters and leaders. The technical schools will perform like service for those who prefer a more distinctly technical preparation for immediate work or for advanced study.

Doubtless the general character of the high school will be altered by its entrance upon the field of practical training, but it is safe to say that the traditional material of the curriculum will not be abandoned, and that the school will never become a trade school. It would be a sad day for education and for the race upon which opportunity should cease for the study of the ancient literatures by those eager and qualified, with all the helps which modern erudition and research afford. Whole spheres of æsthetic enjoyment rest upon the canons of art which we inherit from the ancients. We have in them a precious heritage which we will not throw away. It is as important that the few should devote themselves to the classics and keep alive for us the sacred fire of pure taste, as it is that the many should be fitted for some active labor. The strange increase in the number of high-school students studying Latin (34.90 per cent. in 1889-90 and 50.39 per cent. in 1898-99) will cease as the business courses absorb more pupils, but it is to be hoped that a certain proportion will

always continue to study that language. Greek, with its very moderate number of students, need not perish as a high-school study, nor will it perish as long as Greek scholars are found in our corps of teachers. Those who are to be ministers, lawyers, doctors, teachers, and journalists will often find Latin and Greek within their scheme of work.

The course of the high school, having for its aim simply the education of all youth coming to it, must be elastic. At the same time there will be certain studies which will be selected as of such general value as to be required of all pupils; the universities will aid the schools in determining these. All other studies than these "constants" will be elective in the sense that combinations will be made of them to constitute a variety of courses, each with its definite purpose. Provided that the choice is carefully supervised and that all work done is thoro, systematic, and properly tested, the element of discipline of mind and character will not be wanting.

It is not necessary to do more than mention the moral function of the high school. The core of sound learning, of correct manners, and of right living that vitalizes every true educational institution is as carefully preserved in the high school today as it has been in the past. It is safe to say that the teaching force of the public high schools, 30,489 in number, and guiding a host of 630,000¹ boys and girls, is improving in scholarship and pedagogical skill, and is maintaining its character. The excellent moral influence of the high school is recognized in every community in which such a school is found. Just criticism on this score has yet to be uttered, and the teachers jealously guard their reputation for loving care of the personal interest of even their least promising pupils.

The institutions of higher education do not intend closing their doors, tho they may properly deny their degrees, to any who have the groundwork for advanced study laid in any manner requiring strenuous employment of the intellect. The ascending path of education, made broader and better adapted to the feet of those who must travel at the gait which nature made theirs, will at no point be closed to any that possess capacity and energy of any kind. But at frequent intervals there will be ready and honorable egress to the table-lands of productive toil. We shall cease to create a disappointed class. No one will be compelled to struggle in some fashion to the top or consider himself an educational failure. It is useless to deny that the practical forcing of a man or woman to continue the preparatory work of life, when the zest for learning is lacking and the longing for active work strong, often results in the adoption of a profession as a *pis aller*, and a lifelong attempt to fit a round peg into a square hole.

The high school will not become a trade school, teaching merely some one handicraft, nor will it occupy the place of the technical school, which

¹ Statistics of secondary schools. Additional information for 1899-1900.

offers special training for the naturally inventive in matters of mechanic art; but it will prepare for active life at various points. It will not by any means abandon its office of layer of the foundation for advanced work in the subjects that come within its scope and for a general advance into a higher sphere of intellectual effort.

DISCUSSION

STRATTON D. BROOKS, high-school visitor, University of Illinois.—“When in the course of human events it becomes necessary”—with such words did our forefathers declare themselves free and equal. Now when I read, “*Resolved*, That we recommend that any piece of work comprehended within the studies included in this report that has covered at least a year of four periods a week, in a well-equipped secondary school under competent instruction, should be considered worthy to count toward admission to college,” I feel that I am reading the declaration of independence of the American high-school system. It is a declaration which shadows forth the functions of the high school in new terms, and because of which we shall build up a better, stronger, more efficient system. It indicates that the academy idea and academy influence are disappearing, and that we shall soon cease to discuss the relative merits of subjects as preparation for life or preparation for college. It has been believed that preparation for life demanded less than preparation for college. Subjects which were more easily mastered or more poorly taught than the traditional college subjects have been accepted as adequate preparation for life. This resolution does not mean the lowering of requirements for admission to college. It indicates rather a belief that the non-college admission subjects have made such progress in organization of material and methods of presentation that they may safely be substituted for some of the traditional subjects. It recognizes that the problem of life and a living demands as close application and as much thought-power as does the securing of a college diploma. There will soon be no need to separate the student body into divisions to which different intellectual pabulum must be administered, but for all there will be one object or set of objects, the means only varying with the individual peculiarities of the pupils.

What are these aims? In the first place it is the business of every man to earn a living. Life and the means to sustain it are the primary aims of living creatures. The men who cannot earn a living may by public or private charity be allowed to exist, but they are always debtors to civilization; hindrances, not helps; clogs on the wheels of progress, which may be endured, if not too numerous. Every man should have a vocation which will support himself and family, and the school may, therefore, have

A. VOCATIONAL AIMS

By this I do not mean that the school shall devote itself to the so-called practical subjects, or shall attempt by short-cut methods to make callow youths into experienced business-men. The school is supported by public tax, and it must deal impartially by all who contribute to its support. From the many things which it may teach it should select those which are suited to the needs of all. It is not the function of the public high school to train specialists in any line, but to teach such things as may find application in almost any vocation. What vocational aims may the high schools properly have?

1. *Directly practical*.—There can be no distinct line of division, but here would lie all those facts and processes which can be transferred directly to the business of life—the elementary part of mathematics, a portion of the bookkeeping work, and drill in

language. This last should include, if need be, improvement in reading, in spelling, and in writing, but especially ability and facility in accurate and concise self-expression, both oral and written. As by self-expression the self is built up, the soul enlarged, we have touch also the æsthetic and ethical aims of school work; and as self-expression demands ideas and reasoning ability, the effort to be practical brings with it a supply of facts and training in logic.

2. *Conventional.*—There are some things worth knowing because the world knows them. The men and women with whom we meet, and with whom we must work, know things and say things and do things which may have but small bearing on practical life, but the man who is ignorant of these conventionalities finds himself at a disadvantage. The various circles of life have different sets of conventionalities. The mispronunciation of words or a lack of knowledge about Shakespeare might not affect a day laborer, but there are circles to whose inmost shrine such a sinner may not come. Because we do not know in what circles our pupils may fall, we must teach to all as much as possible of the conventional world knowledge.

3. *Disciplinary.*—(a) After all, the best vocational aid which the high school gives lies in the realm of work not called practical, in those things by which the pupil is taught to think. The ability to think accurately and correctly, to determine the given conditions, to draw the correct conclusions, to state them concisely, and to use them effectively—this is the essentially practical thing. Language, science, mathematics, history may, and do in this sense, become essentially practical. The boy who once told me that he was studying Cæsar in order to become a better blacksmith than his father had a better understanding of the function of the high school than many teachers I have heard. With this understanding, there is no distinction between those who are preparing for college and those who are not. They may, from choice, be found pursuing different subjects, but the function of the high school is the same for both—to teach them to think; and the measure of success will not be the facts they know, but the power of original thought they have acquired.

(b) There is still another task before the high school on its vocational side—that of teaching its pupils to work. This is an age of work, and the pupils should come forth with an understanding of the dignity and necessity of daily labor. Accuracy, rapidity, neatness, and completeness are practical things, and may be taught in any subject. The boy who has learned these lessons from quantitative experimental work in physics may become, and usually will become, a better bookkeeper than most of those who claim to have passed the subject.

B. GOVERNMENTAL AIMS

Life and liberty are our first desires. These necessitate government. With us the power of government is vested in the people, and the schools may justly have aims looking toward the perfection, perpetuity, and vitality of the national life. What are these aims?

1. *To maintain equality.*—It is one of our beliefs that every boy shall have an equal opportunity to choose his own vocation in life. The intelligent choice of a vocation demands a broader knowledge and a better understanding than is furnished by a course ending with the elementary school. Most high-school pupils do not have definite selections of vocations made, and those who have seldom follow those selected. They are in an age of changing interests, and it is the function of the high school to direct, suggest, control, and in the end leave the pupil with a general intelligent interest in the varied activities of life; to lead him as far as possible to an understanding of the conditions under which he lives, and to enable him to choose more wisely the work which he shall do and for which he is suited. The high school must stand ready to help any boy, no matter what his station in life may be, to make the most of himself, and thus prevent the establishment of a governed and a governing class.

2. *To promote good citizenship.*—(a) By increasing intelligence: To exercise the powers of government either as a voter or an officer demands ability to think. Intelligence is the protection of democracy against the demagog. While an elementary education may suffice for the mass of voters, a democracy always needs men of higher powers and greater ability. Many such men have been found in the past who could claim no college for their alma mater, but for the future we are looking more and more to the college-bred men for our leaders. While we are prone to say that we must do the greatest good to the greatest number, and while the pupils not going to college are numerically more important, yet we must remember that it is no less important that the high school should set before some now unpromising lad that task which shall challenge his powers, lead him to discover himself, and bring him out to be a benefactor to his race or the protector of his nation. Not knowing who he is or when or where he is to be found, it becomes necessary for all the high schools everywhere to teach all the pupils in them so that they are best fitted to go into life when need be, and so that, at the same time, they may, if they choose, go on with a college course. Nor is this impossible. We are now in a transition period. Some mechanical difficulties present themselves, but these are rapidly disappearing. The Declaration of Independence has been promulgated. We are now in the period of the Articles of Confederation, but the time of the constitution is not far distant.

(b) By character building: An educated rascal is a greater menace to the community than an ignorant one. Our education should do all that it can toward the building of character. This is done by the æsthetic and ethical sides of school subjects. Sometimes these may be affected almost directly, as in art and music, but for the most part they come about quite indirectly from the daily contact with various subjects and from the personal influence of the teaching force.

C. LIFE AIMS

After all, the first object is to live, and this includes much more than the earning of a living. Life is more than buying and selling and toiling and planning, and we hear much of the necessity of teaching our pupils to live the best life. It seems to me, however, that, when we have done all of the things here set forth, this is the result, and the high school has performed its full function.

ROUND TABLE CONFERENCES

THE ENGLISH CONFERENCE

LEADER — JAMES H. HARRIS, PRINCIPAL OF MILITARY ACADEMY,
ORCHARD LAKE, MICH.

[SYNOPSIS OF INTRODUCTORY REMARKS BY THE LEADER]

A retrospect of the course in English during the past ten or fifteen years reveals a progress that is as revolutionary as it is encouraging. 'Tis a far throw from the narrow, scanty, circumscribed character of the work in English as it existed ten years ago in our secondary schools, to the broad, rich, generous, and vitalizing curriculum which we see today. Its growth has been essentially organic, and has followed with striking and scrupulous fidelity the general laws of organic development. From a state of almost pure potentiality we have seen it emerge into a separate and distinctive entity, gradually but steadily dissociating itself from the other subjects, and slowly but irresistibly gaining recognition for itself and for its right to a place in the hierarchy of studies.

The evidences of an undeniable growth in both the social and educational interest in the subject of English are found: (1) in the enlarged amount of work required of

pupils ; (2) in the improved and more scientific character of the teaching ; (3) in the increased amount of time devoted to the subject ; (4) in the evolution of a distinct class in the educational world whose work is the performance of this function ; (5) in the large number of text-books constantly appearing ; (6) in current literature on the subject.

The ground for this extraordinary interest and activity in this subject lies in two causes : first, a dynamic appreciation of the cultural and disciplinary possibilities of a study of the masterpieces of English literature ; and, second, a lively sense of the value of our native tongue as an instrument of social communication. Cultivation of the art of expression as a social obligation and as a phase of the law of economy has but recently appealed to us, but in these, philosophically speaking, lies the impelling cause of the interest and progress in English.

The present status of the English problem is distinctly encouraging. On the main principles of our work—its character and aim—we are in substantial unanimity. Such differences as exist are exclusively upon matters of detail, and are the problems which logically grow out of progress. They will adjust themselves to social needs.

DISCUSSION

The discussion took the form almost exclusively of a consideration of the importance of reading in the cultivation of an appreciation of literature. It was opened by Miss Aldrich, of Cincinnati, who earnestly advocated increased attention to the art of reading, or elocution, in its best sense. The discussion was resumed by J. H. Thomas, of the University of Michigan ; Reuben Post Halleck, of Louisville, Ky. ; Miss Lucia Stickney, of Cleveland, and others, all of whom, while deprecating any efforts toward artificial elocutionary effect, were insistent that more attention should be given to the art of reading.

MR. P. M. BUCK, teacher of English, High School, St. Louis, Mo., presented a statement of the plan pursued in the St. Louis High School to give the pupils a first-hand acquaintance with English authors, American and British, whose place in literature is assured. In brief, the pupils of each half-year are expected to read at least one of a prescribed list of books of one of the great names in literature during a term of three or four weeks set apart for that particular author. In the course of four years, following this plan, the pupil reads, in the order of adaptation to his age and mental development, one or more of the best works of the thirty or forty greatest names in literature. The works thus read afford a theme for conversational exercises, class themes, and home essays by the pupils, and class-room lectures or talks by the teacher, who supplements the observations of pupils and assigns to the author his acknowledged place in literature. Thus the reading of pupils during the high-school course is directed, and a taste for the best writing is cultivated that will prevent the reading of inferior books ; the material for thought and composition is furnished, and the power of oral and written expression is developed by acquaintance with the best models and by individual practice.

The discussion was closed by Superintendent F. Treudley, of Youngstown, O., who, in a happy five-minute talk, brought out the close relationship between personality and the art of expression, and the dependence of the latter upon the former.

LATIN CONFERENCE

LEADER—F. F. MOULTON, TEACHER OF LATIN, HIGH SCHOOL, HARTFORD, CONN.

[SYNOPSIS OF LEADER'S REMARKS]

Free schools, from their very nature, are the barometer of the nation's intellectual life. They are not alone the depositories and conservators of knowledge, but they are the levers of progress and the brakes on wild excess.

In this age of progress and expansion there is developed a yearning for the new and the temporary, resulting in fads, which in the schools conducted by men and women of experience are entirely inexcusable. Change in methods for the mere sake of change is just as reprehensible as stubborn unwillingness to change the old for a new and better way.

Ever since Charles Francis Adams delivered that famous speech at Harvard, attacking the results and aims of classical study, opinions in regard to the aims and methods of studying Latin have been divided. Many, catching the new idea, were ready to cast aside everything that was old. As usual, the new converts were ready to magnify all the sins of the past in order to show an entire change of heart. It became the fashion to scoff at grammar and the old-fashioned drill. These ideas are all too prevalent. They strike at the very foundation of all higher education. No wonder at the cry of distress by teachers of Latin and higher English all over the land.

Grammar is the interpretation of language, the symbols by which the power of language is revealed. And it is this power of language that we should strive to attain. Do not, then, teach grammar less than formerly, but better. To classify thoughts and group clauses, as "cause," "condition," "result," etc., is just as much science as to classify the phenomena of nature. There is a science of chemistry only as we make it science by the way we learn it. There is more science in Latin taught scientifically than in physics taught unscientifically.

The great advantage in translating Latin is that it compels one to observe the force of grammatical and logical structure, the effect of position and arrangement of words and clauses. Our object is not to speak Latin, nor primarily to read Latin literature. A person born in ancient Rome, speaking the Latin language from a child, was no wiser than a person born in America, speaking English. The mere substitution of one language for another is not an object of importance educationally. The guides of Europe, speaking several languages, may conduct travelers to the tomb of Virgil or Dante or Shakespeare, but how marvelously different is their power of thought and expression from that of Virgil, Dante, and Shakespeare themselves! It is toward, if not to, the higher education of the forum, of eloquence, of literature, that we try to educate our pupils by the study of Latin.

Thoroughness, drill, education, are the aims of classical instruction. Concentration and development are prime factors in the consideration of methods. The first-year work, the authors to be read, the order in which they should be taken, what part Latin composition should have in classical training, and how it may be combined with the regular work of translation, are questions for discussion.

COMMERCIAL STUDIES CONFERENCE

LEADER — THOMAS H. H. KNIGHT, OF THE GIRLS' HIGH SCHOOL, BOSTON, MASS.

[SYNOPSIS OF INTRODUCTORY REMARKS BY THE LEADER]

There is one thing which I should like to have clearly stated and defined, and that is the status of the commercial work in the high school. If one thinks the question an easy one, let him look about him and see how diverse are the opinions of educators. Chicago proposes to have a commercial high school, and her superintendent visits other cities to study their methods; and the next thing we hear is that the commercial-school idea is abandoned and a commercial course in the regular high schools is to be substituted.

Definite commercial instruction in the American public school has only very lately attracted attention, and no strong, vigorous policy has yet appeared. Should it supplant the business college and nothing more, or should it be educative simply, without any attempt to compete with technical business schools? Between these two extremes lies the

question. Of course, a perfectly safe and conservative answer would be the golden mean ; but that is dodging the question. Either the practical or the educative, either the art or the science, will be uppermost, and the other will be subsidiary. To whom shall we go for an answer ? The business-college man is not an educator ; he does not pretend to be ; he often ignores utterly the pedagogical value of the subject he teaches.

The professional educator will not consider the subject. Shall we go to the businessman ? Some business-men say that a special training for commercial work is not necessary ; that business is a thing which can be learned only in a store or office, all previous training being practically thrown away. Such men would prefer that the youth would come to them with a broad general education, such as would make him intelligent and receptive, rather than expert and perhaps narrow. Others require that the young man or woman who comes to them shall be immediately useful ; they have no time or inclination to instruct clerks and assistants in their duties. Perhaps a common ground for these two classes might be found in a properly constructed high-school course. I think I may with propriety quote from a very able article which appeared in the *North American Review*, from the pen of Hon. James Brice : "The function of a proper course of preparation deals with both aptitude and knowledge. It ought to aim at forming and training the mental faculties most needed in business, and it ought to impart the kinds of knowledge most serviceable in business."

If we are to consider that it is not merely clerks and stenographers that we are training, but men and women ; not machines, but intelligent beings, then the course must be so planned that along with a general development there shall be given, not a mere smattering of practical subjects, but a solid foundation for the work of life. The subjects must be taught with the same aims and with the same regard for educational principles that are recognized in other subjects.

DISCUSSION

I. O. CRISSY, state inspector of commercial work for New York, expressed the opinion that business education is a proper function of the high school, and that this is becoming more generally recognized. He did not think that the course in the high school would ever wholly supplant the work of the good commercial college. He thought the poor commercial colleges would be likely to suffer from the introduction of the commercial course in the high school, but that the community could very well spare them.

ALLAN DAVIS, of the Washington Commercial High School, said that the amount and character of the work in the commercial department in Washington is equal to that of any school. He said that the subjects desired in a good commercial school are already very largely in the high-school curriculum ; they simply need adaptation to the needs of the commercial department. The study of language should lead up to the correct and vigorous use of English in business correspondence. History is often very poorly taught, but if the spirit of history can be brought out, if it can be shown that the great facts like the fall of Carthage and the Hanseatic League were commercial, an interest is aroused and stimulated which makes the subject vital. All of the work of the school should be related and it should be developmental.

TEMPLETON P. TWIGGS, of the Detroit Central High School, stated that the public sentiment, which had originally been against the commercial department, has changed in its favor. He gave a synopsis of the course in the Detroit High School, and explained that pupils entering the school had an opportunity to understand very clearly what the different courses were before making a choice.

SUPERINTENDENT CHARLES E. CHADSEY, of Denver, said : There are many cities not large enough, or in which public sentiment has not been sufficiently well crystallized, to permit separate commercial high schools, where successful commercial courses

can be established. The tendencies of educational thought are strongly favorable to such courses. In preparing commercial courses the greatest care must be taken not to permit them to be less educational than the parallel courses of the high school. There is no reason why the commercial course should, in any respect, fall below other courses in the development of power. A four-years' course can well afford to have the first two years devoted to studies which are found in other courses, concentrating those studies peculiar to a commercial course in the last two years.

DR. H. M. ROWE, of Baltimore, said that both the cultural and the practical side of the commercial department ought to receive attention. He thought no subject could be properly taught without resulting in a gain in both directions.

There was a unanimity of opinion that the commercial work ought to be of the same value educationally, and receive the same consideration, as the ordinary high-school work.

BOTANY CONFERENCE

LEADER — LEWIS MURBACH, CENTRAL HIGH SCHOOL, DETROIT, MICH.

[SYNOPSIS OF OPENING REMARKS BY THE LEADER]

The three factors in the consideration of any school study are the pupil, the teacher, and the subject. If time permitted, it might be profitable to discuss the pupil and the teacher, but of most practical value to the gathered teachers will be the consideration of the subject taught.

While every high-school teacher of botany should be interested in the advances of the science of botany, and should perhaps even add his mite, from time to time, in the way of some contribution, it is not these that will occupy our attention so much as the practical side — what kind of teaching as to subjects and methods will afford the best results to learners, who may wish culture, an introduction to science, some practical knowledge of plants, or even the ability to teach the rudiments.

We may pass by the question of the place of botany in the high-school curriculum, on the assumption that everyone understanding its educational value gives it a place in the early part of the high-school course, either as a culture and training study or as an introduction to science. As these have to do only with the rudiments of education, which should be acquired by the same sound methods, we may begin with the importance of teaching botany by the laboratory and field method now commonly employed.

It is not so long ago that the older didactic informational method was in vogue, and some of us had our first botany lessons under its rule. Newer workers combine its good features with the laboratory method. Since the laboratory method has been introduced into high-school science teaching, there have been written a number of elementary text-books, treating plants from different standpoints and using about as many different methods as there are authors. Yet these books are the expressions of the ideal ways of teaching suggested by some of our best university and high-school teachers. Much time could be saved by combining the best points of all these books. All agree on the laboratory and field method as the best.

Another subject of interest is the relative amount of time to be given to observation work (in field and laboratory), written work (including drawing), and recitation. In the old way, book learning was the chief thing, but the newest tendency is to an abundance of field work. This is very profitable when well done, but the many questions and the exuberant remarks of pupils on an outing are too frequently mistaken for interest and enthusiasm. Laboratory and field work without notes and drawings showing definite attainments lack a large part of the training that this method can give. The recitation is needed to bring order into the confused or scattered facts learned, and to build up a

logical whole. How much time should be given to each of these is a question of interest to all.

That which should be taught, as held by prominent teachers at different times, is indicated in the evolution of the newer text-books. There has been a slow transition from the systematic thru the morphological to the physiological standpoint. At present the greatest stress is laid on ecology.

But these are only the broadest and most general indications of where it is thought the high-school pupil can best use his time in the study of plants. Of the two phases of plant life, some lay stress on the physiological relations as expressed in the vegetative stage, and others on the reproductive phases. Then it becomes a question of the amount of time to be given to such topics as germination, seedlings and their organs, and, on the other side, flowers, fruits, and seeds. Summing up, then, we have for consideration:

1. The importance of teaching botany by the laboratory and field method.
2. Text-books.
3. The relative importance of germination, seedlings, the adult plant, flowers, fruits, and seeds.
4. The amount of time to be given to observation, written work, and recitation.

DISCUSSION

DR. POLLOCK, of Ann Arbor, Mich., said that it is still necessary to emphasize the value of the laboratory method and to combat the idea that all knowledge can come from books. Laboratory work should, however, be aided by text-books. He said that he believed in the value of teaching morphology, for which study material is easily obtained.

The leader suggested the value of some work in plant identification, and stated that in the Detroit High School the pupil analyzed from three to ten plants.

In answer to a question about text-books, the leader suggested Coulter's *Plant Studies*; Bergen's *Foundations*; *The Teaching Botanist*; Barnes' *Outlines of Plant Life*; Atkinson's *Elementary Botany*; Bailey's *Elementary Botany*. He also stated that the course in botany in the Detroit High School was ten months, five recitations per week, each two periods long.

MISS CHANDLER, Elgin, Ill.—The amount of time to be given to the study of germination, to flower, fruit, and seed, or the reproductive phase, should be at least twice as much as to the whole subject of cryptogams and gymnosperms. The study of the gross anatomy of the seed and the organs of the seedling, accompanied by appropriate experiments in plant physiology, should occupy about two-thirds as long as the study of the flower. This greater length of time should be devoted to the study of the flower because of the unexcelled opportunity for training in observation of morphological features offered by the manifold variations in flowers, and for the training in thinking to be obtained from the study of ecological problems in connection with the subject of pollination. To the study of fruit and seed, following upon the study of the flower, perhaps as much time might be given as to the study of the gross anatomy of the seed, made earlier in the course, attention being given chiefly to the origin of the various parts of the fruit and to the adaptations for dissemination.

It was stated that the University of Michigan and Cornell University had given credit on their college courses for superior work in high-school botany.

MISS WILLIAMSON emphasized the valuable results in leading the pupils to see the unity of nature in showing the development of the sexual reproduction of plants thru the asexual.

Several speakers emphasized the value of original investigations when the teacher's

time, the locality, and the teacher's qualifications favored such work. The discovery of new facts of value to science was urged as being quite within the field of a high-school teacher's work.

ZOOLOGY CONFERENCE

LEADER — FRANKLIN W. BARROWS, TEACHER OF ZOOLOGY, CENTRAL HIGH SCHOOL, BUFFALO, N. Y.

[SYNOPSIS OF OPENING REMARKS BY THE LEADER]

1. Laboratory and field study should form the basis of the entire course, and should be allotted at least half the time of the course.
2. The most profitable study of any organism takes into account, not only its actions during life, but also its structure, both internal and external, as revealed by dissection.
3. Every student of zoölogy should practice the use and application of the compound microscope,
4. No plan has yet been devised by which zoölogy classes in cities can do even a fair amount of field work.
5. Since the pupil cannot go to the animals, the animals must be brought to him, alive and sound, in sufficient numbers and variety to give the schoolroom a distinctly zoölogical aspect. Aquariums and vivariums should be the centers of interest in every laboratory.
6. A liberal use of photographs, lantern slides, charts, and illustrated books will economize both the time and the mental effort of the classes. Museum specimens and anatomical preparations are useful for the same reason.
7. The materials for the study of economic zoölogy are everywhere near at hand. The subject is of transcendent value, and should be prominent in every course of study. The career of the English sparrow and gipsy moth in this country and of the mongoose in Jamaica, the importation of insects to the Pacific coast to fight the orange scale and the San José scale, and of others to fertilize the fig trees, are not only interesting zoölogic episodes, but important economic revolutions. The life-histories of mosquitoes, flies, tapeworms, the trichina, and the close association of these and other pests and parasites with diseases of man and domestic animals, should be matters of common information in all our schools. So, also, the valuable services of many despised and persecuted animals, such as toads, snakes, birds, should be not merely alluded to, but thoroly taught as important economic principles. The achievements of our national Fish Commission, Bureau of Entomology, Bureau of Animal Industry, and other state and federal agencies should be brought prominently before the pupil. To this end the library of the laboratory should be furnished with a judicious selection of government reports, bulletins, and monographs.

These things should have a place in the course because they are zoölogy and because they are too significant to be any longer ignored in our schools. Zoölogy will lose nothing of its effectiveness as a culture study thru this consideration of its vast utility. The pupil who obtains this outlook will become more appreciative of the life and services of the professional scientist, more alert to his own surroundings, and better fitted to live wherever fortune places him.

DISCUSSION

LEWIS MURBACH, Central High School, Detroit, discussed the value of dissection in class work. In spite of current arguments against it, he regarded a moderate amount of dissection as indispensable. The objections of pupils to handling animals for dissection are decreased by beginning with the lower forms. Time may be saved in the study of some forms by the use of dissected preparations in the laboratory.

W. H. MACCRACKEN, Buffalo, N. Y., believed that it was a mistake to expect the beginner in zoölogy to pay much attention to minuteness of detail in dissection. In place of the fine points of anatomy often insisted upon, he favored a few simple demonstrations of function by vivisection.

PRINCIPAL WILLIAM J. S. BRYAN, Normal and High School, St. Louis, Mo., attributed to the lack of experience the repugnance of pupils to handling most forms of animals. When interest has been aroused, this aversion is removed. Mr. Bryan asked how much use of the compound microscope is profitable in high-school work; will a simple lens answer all purposes?

The leader, in reply, said that the pupil should first be trained to use his own eyes "for all they are worth." After this he should acquire the power to use the compound microscope, because the instrument may be of great service to him in the future. The technic of the instrument is simple and easy, and no school should deprive its scientific pupils of the practice necessary to make them independent in its use. In zoölogy, in particular, they are neglecting a great opportunity if they fail to see some of the protozoa in this way. Many of our pupils are training themselves to become teachers, and cannot begin too soon to learn to handle the microscope. It is not wise to add to the labors of teacher and class by attempting to teach histology; on the contrary, the microscope should serve as an adjunct to the other laboratory work, to be employed wherever it may simplify or illumine the subject in hand.

LEWIS MURBACH, in response to a question, gave a brief outline of the course in the Detroit high schools. The present tendency is to reduce somewhat the amount of dissection and to emphasize the study of the living animal. Such harmless experiments as the tying of the fins of a fish in order to learn their function may well be substituted for some of the dissections. This kind of work is introduced in Detroit wherever possible. Beginning with the amœba, the classes then dissect a few invertebrates and two or more of the vertebrates. No pupil is compelled to handle forms that are repulsive. After the dissection of a type, other related forms are presented and compared. He believed that the movement to abandon zoölogy in high schools is led by a few university professors who prefer to reserve to themselves the pleasure of teaching, for the first time, the interesting facts of zoölogy. The high school cannot afford to give up this training until better reasons are presented.

W. H. MACCRACKEN, of the University of Buffalo, approved the course just outlined rather than one which devotes the whole time to the study of one or two types to the exclusion of all else. He quoted the sentiment of a student who had passed thru such an experience and complained that, for him, zoölogy had "too much frogginess." At the request of the leader he presented a paper on "The Camera in Zoölogy." The following is a synopsis of the paper:

"Up to the present time, the taking of photographs has been more a matter of recreation than of practical utility. I wish to emphasize those points which should make the camera an indispensable adjunct to any biological laboratory. In all scientific work it is necessary that we aid and support defective memory. In notes, and still more in sketches, we have to take into account the element of personality. Especially is this true when the subject studied is alive and moving, as most zoölogical matter is or should be. A sketch is at best a series of efforts of memory. The entire picture, with exactness of detail in light and shade, is possible with the camera in the one-hundredth part of a second or less.

"It may be urged that the student, in drawing, comes to observe his subject more closely than he otherwise would. I am by no means sure that, in a case where an organism moves slowly enough to admit of prolonged observation, or is stationary, a student will not observe it quite as closely in the work of accurate focusing. The camera is being used more and more as we appreciate the importance of studying plants and animals in relation to their environment. A great point in favor of the camera as a

zoölogical implement lies in the use that can be made of it in recording the metamorphoses so common in the life-histories of many animals.

"The laboratory camera must be a long bellows instrument, in order to admit of varying adjustment, and should have several lenses of various focal lengths, that will cut clearly to the edge of the plate, with a sufficiently large aperture for instantaneous work. The camera must be constructed to work in any position. Your shutter, to catch the motion of a bird's wing, must work in one five-hundredth of a second, and then will fail to give a clear image in the case of a humming bird.

"There is no time for micrometric focusing. Very recently I contrived a piece of experimental apparatus by means of which I have had a little success. I took two lenses, each twenty inches focal length, and set them so that I had a sort of double-barreled camera. One lens focused on a two-inch square piece of ground glass, and the other on the surface of a film beside it. The two cameras being parallel, of course the picture on the ground glass was exactly like the image on the film, and by watching the glass I could tell just what sort of a picture I would get, and just when the subject was in focus. So the instant of springing the shutter was determined to a nicety.

"You and I may yet be able to put our nickel in the slot and watch the caterpillar turning to a chrysalis, or the mother bird feeding her young."

In conclusion, the leader urged the importance of the subject of economic zoölogy, referring to the seventh thesis. With scarcely any sacrifice of time from the regular laboratory work, it is possible to introduce a vast body of facts of the greatest economic value, facts that many schools have always ignored. We owe it to our pupils and we owe it to the government, which supports the schools, to teach something of this important subject.

DOMESTIC SCIENCE CONFERENCE

LEADER — MISS ABBIE L. MARLATT, MANUAL TRAINING HIGH SCHOOL,
PROVIDENCE, R. I.

[SYNOPSIS OF INTRODUCTORY REMARKS BY THE LEADER]

In consequence of changed social and industrial conditions and increased complexity in domestic life, the old-fashioned home training has become a thing of the past. Some thirty years ago the need of reviving and developing such training was recognized by a few long-sighted persons, who conceived the idea of introducing instruction on this subject into the schools. From this small beginning such a thoro appreciation of the work has developed that it is now found as a regular part of the school curriculum in many cities in this country.

Realizing its value and knowing the lack of definite knowledge of its scope and limitations, a few leading workers and thinkers organized themselves in 1889 into what is called the Lake Placid Conference on Home Economics, which meets annually. To one of its committees was assigned for consideration the subject of the teaching of home economics in elementary and secondary schools. Their report, representing three years of conscientious work, is now before this round table for discussion.

That the subject of domestic science or household economics is of educational value can be established thru careful study of methods, considering the subject from three points of view—that of the individual, that of society, and that of the school in its attempt to train the individual for himself and society. As a field for self-expression and self-control, household economics is admirable, as it begins with that in which the child already has a living interest—the home—and gradually broadens the horizon by showing how all the forces of nature and society tend to center there.

From the standpoint of society there can be but little question of its value, as the most superficial examination of vital statistics demonstrates the poor physical condition

of a considerable portion of the population, with the consequent loss to the state, thru lack of effective work and resultant drain on public funds for remedial measures.

In the school life is found the necessity for due proportion of hand-work and thought-work, each of which should aid the other. This subject offers abundant opportunities for arousing the interest of pupils in other studies, as it presents a field for the application to daily life of theoretical knowledge gained in the sciences, arts, and economics.

How to arouse a desire for further study in the individual whose school life is limited to the grammar grades is a problem demanding consideration by all educators. One solution of the difficulty may lie in a closer correlation of school work and social environments, which, by showing the value of study as a means of controlling conditions, may lead to an appreciation of the necessity and advantage of a wider knowledge, if effective personal and social work is to be done.

By the judicious interrelation above referred to a conception of the relation of school studies and things of daily life, and of their value to the individual and thru him to society, would be acquired.

DISCUSSION

MISS ALICE R. RAVENHILL, inspector of classes in hygiene in West Riding of Yorkshire, England, special representative from the board of education of England and Wales, commissioned to report on the teaching of domestic science and hygiene in the United States.—I believe that this is an epoch-making report, that it is an effort worthy of thoughtful study, and that its suggestions along the line of the teaching of home economics are exceedingly valuable. Such introduction will train toward right understanding of the laws of health, and how they may be obeyed, which will emphasize the need of better shelter, proper food, pure water, good ventilation, rational cleanliness, and suitable clothing; will help to remedy some of our economic evils, as well as train for right appreciation of life. It is what we need, and are striving to obtain, in England. I am delighted to find that here in the United States there are a few places where such instruction is being given.

A. E. WINSHIP, of Boston, Mass., asked Miss Ravenhill whether she agreed with everything in the Lake Placid report.

MISS RAVENHILL.—I believe in the important features of the report, its ideals and aims; that I may not agree with some of the minor details is non-essential. As I previously stated, I believe it to be an epoch-making report. In this connection I may be allowed to read from a private letter from Michael Sadtler, in which he says how fortunate that nation would be which could provide in its schools instruction in cooking, sewing, and hygiene.

SUPERINTENDENT CHARLES H. KEYES, of South Hartford, Conn.—I am very much in favor of this subject of home economics. In fact, I have sent two of my teachers to New York to study basketry and weaving, with a view to incorporating these with the art work in the grades. I do not agree that a boy should have instruction in cooking and sewing. That is not his work. He will eat what is set before him. It is the wife's duty to provide suitable food, hence the need for her training.

MISS MARLATT pointed out that the arts of cooking and sewing, tho important, were far from all that was included under home economics; that a knowledge of personal hygiene, sanitation of house and city, and of food values was essential to the boy as a future citizen and lawmaker; and at present the school must provide such training, if it is to be gained.

FRANCIS W. PARKER, Chicago Institute.—What is the object of all this instruction?

MISS MARLATT.—Training the individual for life.

COLONEL PARKER.—If its object is training for good citizenship, then I am with it. Go ahead, you are doing a good thing.

DR. WILLIAM T. HARRIS, United States Commissioner of Education.—One question I should like to have answered. Why do you advise weaving a blanket with Indian decoration?

MISS MARLATT.—As an illustration in connection with the study of primitive life, and also because the design is comparatively simple.

DR. HARRIS.—The Indian design is not simple; every color, every mark, every stitch, has a deep religious significance, which the Indian understands, and not one item of which he would dare to omit or change for fear of offending the gods. It has no such significance to the young child, and so should not be used. In your course of study in the primary grades I see no consecutive arrangement, no leading on from one complete step to another; just a bit of one art and a bit of another art; a mosaic, not in pedagogical order, therefore wrong. What is the reason for that?

COLONEL PARKER.—In the first four years of school life the child must learn about all the great industries, and learn by doing.

DR. HARRIS.—That idea is all wrong. The child learns thru inhibition. On the cortical surface of the brain, the great area is that which is occupied with the function of inhibition. The child gains power by learning to control himself, to refrain from motor action. By placing this work of home economics in the lower grades, responsibility and care will be laid upon the child. John Fiske has pointed out the reason for the long period of human infancy, of incompleteness. We should do nothing to render this period of plasticity, of receptivity, less. In teaching a child to make a bed, you say: "Don't do that way; do this way." In thus compelling the child to follow one method, in place of all others, you fix upon him responsibility, and thus care. Leave the child free to play games as he will, but do not call it formal education. I believe that home economics should be in the schools; but not till the child is in the seventh and eighth grades is he ready for the careful, detailed work, which should be carried out step by step.

MISS GLADFELTER, St. Louis, thought that the cooking, sewing, and cleaning might be placed in primary grades, and that the grade teacher, with only a very short period of training, could do all the work that is essential; that the ethical and sociological side of the subject could take care of itself. The great aim is training to right methods in the manual work.

To this there were many objections, as the educational value to the individual would then be at its lowest stage.

MR. WHITNEY, of Saginaw, Mich., asked whether, in the high school, much of this training could not be given under the subjects of chemistry and physics, as applications of principles.

MISS MARLATT said in reply: Yes, there is a very large field for work in connection with chemistry, physics, and biology, where no separate laboratory or special teacher is required. Even some of the art side of the subject may be illustrated without a special laboratory. There is no reason why the classes in chemistry should not analyze foods and test for purity, in place of much of the so-called analytical work, or the classes in physics find the temperature of coagulation of white of egg, as well as the temperature of boiling water, or the boiling temperature of sugar solutions as well as of salt solutions, or use the trap as an illustration of siphonage. In bacteriology, observations of changes in food products due to growth of bacteria is a legitimate part of the study, and the step to showing methods of preventing bacterial growth is short and a part of sanitation. There is every reason for this close union between the theoretical sciences and practical life, and each will be benefited by the interrelation.

ALGEBRA CONFERENCE

LEADER — GEORGE W. EVANS, TEACHER OF MATHEMATICS, ENGLISH HIGH SCHOOL,
BOSTON, MASS.

[SYNOPSIS OF INTRODUCTORY REMARKS BY THE LEADER]

Improvement in the teaching of algebra should be sought under the suggestion of the historical principle that the order of acquirement in the individual should correspond to the order of discovery in the progress of human knowledge. Diophantus of Alexandria (about 300 A. D.) wrote many explanations of problems, and in three instances noted in the margin a schedule of the explanation almost exactly like the set of equations that we would use today. For these and other similar reasons, define and present algebra in the class-room as a means of abbreviating the explanation or analysis of arithmetical problems. Algebra does not replace arithmetic; it deals only with the logical warrant for numerical work.

Again, take rules that the pupil has had in arithmetic, and give him formulæ for them, with plenty of practice in evaluation. Here again algebra is an abbreviation of mathematical language. Still another application of this same idea is found in the statement and demonstration of theorems, which must be preceded by a study of the algebraic operations of summation, multiplication, and division.

This introduction gives the pupil three ideas: the equation of condition, the algebraic expression, and the equation of identity.

Factoring should be applied from the beginning to the solution of quadratic equations. Even the method of completing the square should be considered as a special device in factoring. In short, the teaching of factoring should bring out in practical shape, and in the interest of efficiency, the fundamentally important theoretical relation that exists between the factors of an algebraic expression and the roots of the corresponding equation.

GREEK CONFERENCE

LEADER — ISAAC N. JUDSON, TEACHER IN HIGH SCHOOL, ST. LOUIS, MO.

[SYNOPSIS OF OPENING REMARKS BY THE LEADER]

Altho statistics show that Greek is about holding its own in the secondary schools of the country, still teachers of Greek are liable to feel themselves on the defensive, so constant and bitter are the attacks made on the study. The tendency at the universities, too, seems to be to put Greek among the electives both for admission and graduation. This, however, should not discourage those who believe in the high educational value of Greek, for students who pursue the subject from choice are bound to prove themselves earnest and faithful.

Greek is a very difficult language, and perhaps it is better for such as are not willing to work hard, and do not possess by nature some aptitude for linguistic study, to leave it alone. It is true that the student should not follow the line of least resistance, but he should certainly pursue such studies as are best adapted to secure his development. It is a difficult question how far teachers should urge to the study of Greek pupils who are preparing for a college where it is not required; and still more difficult to say how far they should urge to its pursuit those who do not intend to go to college.

It is not my purpose to argue the utility of Greek. The testimony to its educational value is overwhelming. Those who wish to see modern languages put into the place of the classics base their arguments on the supposed superior utility of modern languages. Even if schools and colleges could impart the power to speak languages — which they cannot do — such an acquisition would not possess a high educational value.

The so-called natural method of teaching languages has proved itself a failure, and when applied to the classics is an absurdity, and means simply wasted time. In learning Greek the essential point is the training of the eye, for the object sought is the ability to translate. The reading of the text, therefore, should be considered of the least importance. The most important points are: a constant drill in forms and syntax, the acquisition of a vocabulary, and the training of the pupil to see the meaning of a sentence literally, tho it may be necessary to recast it into good English. Reading at sight, the formation and derivation of words, and Greek in English are also important points.

The arrangement of a program for secondary schools is a question of great importance, especially when a considerable number of pupils do not intend to go to college. Is it possible to teach pupils to read the text of Homer so as to bring out the quantitative rhythmic effect of the verse? In teaching composition, is it better to use sentences which illustrate the principles of syntax consecutively, or sentences and connected passages based on the text?

GERMAN CONFERENCE

LEADER — JOSEPH KRUG, TEACHER OF GERMAN, CENTRAL HIGH SCHOOL, CLEVELAND, O.

[SYNOPSIS OF OPENING REMARKS BY THE LEADER]

In order to secure a practical basis for the subjects of grammar, translation, and composition in modern language instruction, I shall have to speak first of reading. In the high school the reading of classical authors begins on entering the second year. It is natural to begin with the fairy stories, or *Märchen*, in which the German language is so prolific. I prefer Grimm's *Märchen* to all the rest. Adalbert von Keller, the great scholar and Germanist, pronounced them the purest and most idiomatic German that has ever been written. The reading of complete classical texts will then be started in the second year of the high school, by taking up Schiller's *Wilhelm Tell*. I have not been able to find any other piece of classical literature that would answer the ethical and pedagogical demand as well as Schiller's *Wilhelm Tell*. As to the method of reading Schiller's *Tell* and other classical texts, I wish to mention only the following matters pertaining more or less to work preparatory to composition: (1) Do not give any synopsis of the play, the fable, the single acts or scenes, preliminary to the reading. (2) The pupils are to read, not to translate. Elliptical phrases should be completed before they are explained. Difficult or obscure inversions must be changed to the normal arrangement. (3) As to translation of the text, this exercise should be restricted as much as possible. Only those passages which are really intricate and difficult in construction should be rendered into idiomatic English. (4) Colloquial exercises and oral composition must be based upon and developed from reading, or from object-lessons specially prepared for these purposes. (5) Do not chop up the classical text into grammatical hash. Classical language is not the field for studying technical grammar. (6) This will not exclude, however, the use of the grammar wherever we need it to facilitate the understanding of the text.

The principal aim of reading will always be the ready understanding of the text, while oral and written composition aims at fluent and correct application of all words and phrases that will admit of application in conversation. The method of teaching written composition should be adapted to the nature of the subject.

Let translation be the method and means of testing a student's knowledge of a foreign text, but do not make it the means of obtaining this knowledge. Translation takes words out of their natural environment by associating them with English synonyms instead of with the native idiom. If the time given to translating our classics into rather

doubtful English were spent in oral and written composition, it would yield more satisfactory results. There is a place for translation, but it is not in the reading hour. Systematic translation will have to go hand in hand with systematic grammar; as soon as the student has acquired the full knowledge of one sentence, he may at once begin the study of grammar by examining and analyzing the construction of this sentence and the forms of the parts of speech.

A special exercise essentially connected with the study of grammar is the memorizing of the paradigms. Let the forms be demonstrated in connection with the living language. Teach them as they are applied in sentences. The meaning, the form, and the position of the case will then be taught inductively from these model sentences. After all the cases are developed, they will be tabulated and the table or schedule committed to memory. What I have said with regard to declensions may be applied likewise to conjugation. The teacher should consider the different arrangements or orders when he teaches the paradigms, and the student must study and memorize the tenses in the three orders.

German prose work is in the same field with systematic teaching of technical grammar. Here translation will step in. The student must translate in complete sentences and entirely independent of the printed text or any written preparation. It must be the student's principal task to acquire the language as it is spoken.

PHYSICS CONFERENCE

LEADER — CARL J. INGERSON, TEACHER OF PHYSICS, HIGH SCHOOL, ST. LOUIS, MO.

[SYNOPSIS OF INTRODUCTORY REMARKS BY THE LEADER]

The proper place of physics in a course of study is predetermined by those characteristics which differentiate it and other sciences. Physics may be discriminated easily. Natural philosophy, its older designation, is both apposite and illuminating. It implies philosophizing—that is, reasoning like a lover of wisdom—upon obvious phenomena in nature. Biology exercises the perceptive rather than the reflective faculties. It makes heavier demands upon memory than upon judgment. Chemist is alchemist, less its initial syllable; and chemistry, in rationalizing the mysteries of alchemy, has neither abrogated the imagination nor circumscribed the range of its manifestations.

Nature study in the grammar schools could never rise to the dignity of a study of physics. The necessary philosophic quality of mind is, to this class of learners, but a latent possession. A child at nine years of age is a wholly different intellectual entity from the same child at twelve and sixteen. At the earlier year in his life perception and memory characterize his mental mode; a few years later imagination gives complexion to the activities of his mind; while the reasoning, reflecting aspect of the intellect does not attain distinctiveness before the sixteenth year. The Jews had developed sound pedagogic practices more than twenty centuries ago. They recognized the processional incipencies of the cardinal mental endowments, and suited the pupil's tasks to the order of his psychic evolution. It is possible to propagate roses in January and to produce ice in August, but nature refuses to co-operate. There are times and seasons in the intellectual as well as in the physical world. Moreover, the student of physics ought to bring to his study of the science, not only potential, but also certain kinetic mental energies. If the saying be true that "the calculus is the language of physics," it is equally true that algebra, geometry, and trigonometry are the alphabet and the two- and the three-syllabled words of the language. Or, to change the figure, mathematics is the machinery of thought by which alone the most and the best truths of physics may be

apprehended. Niagara without a wheel is not to be compared for usefulness as an efficient force to a spring brook supplied with a tiny "undershot."

Considering, therefore, the inexorable demands which the inherent nature of the science makes upon the thought-processes of the pupils, the last years of the usual high-school course, in which their reason and judgment are in a state of natural, vigorous development, and in which also their mathematical attainments are as full as possible, surely present peculiar advantages for the study of the elements of physics. Botany and physiology precisely answer the requirements of the memory stage. Chemistry, appealing to the imagination, and suffering nothing, directly, from a deficient knowledge of higher mathematics, is admirably adapted to the growth of the child during the second general division of his mental unfolding; while physics, a philosophy, comes logically and conclusively last in the science course of secondary schools.

But the advantage of proper place may be rendered nugatory by improper methods and a lack of proper perspective in imparting the subject. As an illustration in point: Seven recent text-books on physics have devoted an average of 27 per cent. of their entire space to magnetism and electricity. Surely this was not done with due regard for the just balancing of the subject. Doubtless electrical demonstrations quicken interest. But we need to have a care lest our class-rooms degenerate from places of education into halls of amusement.

Again, a school program that provides four periods for laboratory work to one period for class-room discussion, demonstration, and recitation shows want of perspective. The high-school physics laboratory has many and important uses. But, by arrogating too much for it, its over-zealous friends are in danger of precipitating a revulsion of sentiment that will greatly cripple this branch of the work.

Finally, there appears a more or less unconscious surrender by instructors to utilitarian tendencies. In these times, when so much is said about "practical" studies, teachers need to remember, and pupils need to be reminded, that practicality inheres in the person and not in his knowledge. The demand of today is for training, not education: some faculties dragged forth and not all faculties led forth. Not technical training, with a view to future money-getting, but a strong, broad, symmetrical mentality, should be the ideal toward which all high-school teaching tends.

DISCUSSION

[REPORTED BY H. D. MINCHIN, CENTRAL HIGH SCHOOL, DETROIT, MICH.]

PROFESSOR A. W. AUGUR, Lake View High School, Chicago.—In my remarks I wish to speak briefly of two tendencies at present existing in the teaching of physics:

1. At present there is a crowding of too much work into the course. We attempt to teach too much for the time we have at our disposal. We are crowding two years' work into one. The result is that work is not done well; there is a skimming over. It is absolutely necessary that the student be given more thoro drill, and therefore he should not be overcrowded. It is for the teacher carefully to select that which is to be given him and that which he is to overlook. The time at present given to physics in the high school is not sufficient to allow the taking up of the whole subject.

2. The present method of dividing the subject-matter into heads, as mechanics, heat, sound, etc., is misleading to the student. He comes to think of the study as a collection of several subjects. We must get an underlying principle, one that we may cling to in the different sub-heads. At the present I am working for such a plan, and I take as the definition the following: Physics is the science that treats of motion as associated with matter and a manifestation of energy. If we keep this definition in mind, it changes the order of presenting the subject.

We will not take up the properties of matter first, but will begin with motion. The pupil never saw a case of uniform motion; there is no such thing as pure mechanics or pure dynamics. We should take as our first example of motion a vibratory motion. This is almost exact, and can be measured. Discuss uniform motion as growing out of this, and sound as a particular kind of uniform motion; heat, also, as a particular kind of the same phenomenon; etc. This will unify the work and keep it within our limits.

In regard to laboratory experiments, I hold that there are but two reasons for performing an experiment: (1) it illustrates a law; (2) the results obtained by performing it are essential for future experiments.

Do not ask the pupil to perform experiments that are of neither class. Do not ask him to measure a piece of wire unless he is to use the wire and needs to have its length. Teach him the use of an instrument and you weaken your work. He should learn how to use it in a practical exercise. We are in great danger of asking the pupil to do too much. We should aim to have him do a few exercises well, rather than a number with no idea of their meaning or use.

PROFESSOR E. A. THORNHILL, Carrollton, Ind.—I am at present endeavoring to reorganize my work in physics, and I wish to ask what amount of time should be given to laboratory practice.

PROFESSOR C. F. ADAMS, Central High School, Detroit, Mich.—I heartily indorse the introductory remarks to which we have just listened. I think much better results would be obtained if we were to begin our work with motion, and we should not be afraid to begin there. I believe we should have better results from our laboratory if we were to keep in mind that there are many facts and truths that are now well established and need no further proof by the pupil.

In answer to the question just asked, I will say that we have four recitation periods per week for text work and two periods per week for laboratory work. We should have more time. We ought to have five recitations in the text, as we now have to take one of the four for discussing the laboratory exercise of the week. Then we should have at least two periods of sixty minutes each per week for laboratory, where we now have but two of forty-five minutes each. In this state we have laid down as a minimum amount of work for the laboratory a list of about forty experiments. The time now given to these is not sufficient to cover the work as I think it should be covered. Our work lacks in completeness. We lay a good foundation, but the superstructure is lacking. I speak not as a teacher of physics only, but as a teacher interested in the high-school course. In the small schools, where much individual work can be done, more may be accomplished in the same time.

PROFESSOR H. N. CHUTE, High School, Ann Arbor, Mich.—Our great difficulty with the subject of physics is that the boys and girls think they have taken hold of a new language. They get the idea that it is a compilation of hard words. It is, in a sense, a foreign language to them. The sentences that are plain to us are, or may be, meaningless to them. We must translate this language for them, and then require them to translate it back into the language of physics.

We experience other difficulties in the teaching of physics, because of the fact that it is placed too low down in the course. The average boy and girl reach the eleventh grade at about fifteen years of age, and their minds are not mature. They are unable to grasp the subject. They get the idea that physics is a grind. The subject has been given a black eye long before it is reached, and it takes a good half year to remove the fear that has seized the pupil. The parents, and often the principals, are to blame; they are anxious to crowd the pupil, and he is not given the time to comprehend the facts. A lack of interest is the result.

I wish to emphasize what the leader stated regarding the amount of time given to the different parts. The boy is interested in the magnet, and he wants his work all

electricity. There is a tendency to skim over light and heat. Both of the latter are of great importance, and both can be illustrated easily and at small expense.

As to what experiments to perform, I should like to ask where the pupil will land if he is to perform no experiment, the results of which he is not to use in the next experiment. In my work I give four periods of fifty-five minutes each per week to text and three periods of fifty-five minutes each per week to laboratory. I follow the outline prepared by the Michigan Schoolmasters' Club in 1899.

PROFESSOR C. F. ADAMS.—I heartily indorse the idea that no work should be required of the pupil if it is to be of no use to him. Do not have him measure for the mere sake of measuring.

PROFESSOR HERBERT C. WOOD, Central High School, Cleveland, O.—With us no pupil is allowed to take up physics until he has had one year of algebra and the same of geometry. Some of the difficulties I have met in the teaching of physics I find are due to the indifferent work done in the preceding studies. It is necessary that in geography, botany, physical geography, etc., more scientific work be done. We have in our schools introduced laboratory work in connection with physical geography, and we find that better work is being done in physics.

MR. JONES, South High School, Cleveland, O.—Our requirements are the same as those of the Central School. We have physics in the third year. I find a difficulty in getting the pupil to state in mathematical language an expression in physics, and *vice versa*. The teacher of physics has, as his first duty, to teach how to change a statement in physics to one of mathematics. Secondly, he must teach that mathematical expressions do not teach that we can get at a thing exactly. The pupil sees in the laboratory that we cannot get at an exact result.

PROFESSOR F. A. OSBORNE, Olivet College, Olivet, Mich.—As teachers we are too often afraid of having physics considered difficult. If we are to make the study intensely interesting, and give the pupil the discipline he should get from it, we must make it difficult. It is possible to add interest and not detract from its value. It is well to introduce some historical facts. In every study there is encouragement in knowing of the difficulties others had with the subject. Devote one half-hour per week, at least, to the history of the subject. As to the use of problems in physics, I find they are of untold value. My students work 250 to 300 problems each year, and are benefited by so doing. Do not leave out the original work. We do not do so in geometry. The more we make physics difficult and not a grind, the better. In the laboratory work I believe in doing fewer experiments and doing them well. I began by working sixty; I now work about forty. I am decidedly in favor of working a few experiments the data of which are not required later.

PROFESSOR A. P. COOK, High School, Ithaca, Mich.—I have a laboratory about 12×25 for twenty-five pupils. Ours is about a middle-grade high school, and we are placed under many restrictions. Our work must be shaped accordingly. I am in favor of working many problems. I believe in making the subject hard. Do not attempt to dodge all the hard points, but solve the difficulties and derive the benefit. Tell the boys and girls to keep their eyes open and be ready to apply what they have learned.

PROFESSOR H. N. CHUTE, Ann Arbor, Mich.—The question that troubles me is where to get the wherewithal to teach physics. I mean good and efficient instruments. Our foreign friends make them, but Uncle Sam says we cannot have them unless we pay the large tribute. Our lawyers seem to be unable to interpret the law. They do not understand English. They fail to be able to recognize a scientific instrument. We should look up the law, and then translate ourselves into chronic kickers. It is time for the scholar to get into politics.

PROFESSOR ADAMS.—It seems that some protest should be made by the National Educational Association, and I, therefore, move that we enter a protest, and present

it to the secretary of the treasury of the United States, and that our chairman appoint a committee to draw up said protest and present it to the proper authorities. The motion carried. Chair appointed Professors Adams, Augur, and Wood; the committee to report at the meeting July 12. It was suggested by Professor Osborne that each member of the Physics Conference present to his congressman a copy of the report of the committee, together with his own letter. The suggestion was favored by those present.

CHEMISTRY CONFERENCE

LEADER — C. E. LINEBARGER, TEACHER OF CHEMISTRY, LAKE VIEW HIGH SCHOOL, CHICAGO, ILL.

[REPORTED BY F. C. IRWIN, CENTRAL HIGH SCHOOL, DETROIT, MICH.]

At 4:30, July 11, Mr. Linebarger called the meeting to order in Room 9, the chemistry lecture-room. Despite the lateness of the hour, the place was soon comfortably filled with teachers representing nearly every state from Rhode Island to Kansas. Each member of the conference was supplied with a copy of the following list of topics proposed for discussion:

- I. Quantitative experiments: (a) Object; (b) nature; (c) degree of accuracy to be required; (d) number.
- II. The historical method: (a) What is it? (b) object; (c) how much should be given? (d) benefits.
- III. Research work: (a) Feasibility; (b) what problems demand but slight equipment? (c) influence on teachers' work, or students'.
- IV. The ionization theory: (a) Should it be introduced? (b) if so, when and where?
- V. The chemical library: (a) Object; (b) how can it be best used? (c) benefits to be derived from it.

By vote it was decided to consider, first, quantitative experiments. The discussion was opened by Mr. Linebarger. He said in part: A quantitative experiment may be defined as one in which a measurement is made. In chemistry the measurements are commonly of mass and volume. A quantitative experiment determines some physical constant, or verifies some fact or law. It teaches the student that chance does not enter into scientific considerations. It is unnecessary to insist upon great accuracy, for accuracy is but a relative term. The seeking out and accounting for sources of error should be strongly insisted upon, and the result obtained should always be within the experimental errors allowable. Too many quantitative experiments should not be given, and the manipulation involved should not be beyond the ability of the average student. A sufficient number can be easily performed with very simple apparatus. The training derived from quantitative experiments is most valuable.

The discussion at this point turned upon the number of quantitative experiments which may be introduced to advantage in a year's course. The members of the conference were asked to inspect and criticize a series of quantitative experiments used in the Central High School of Detroit. Volumetric measurements in these experiments are made with the burette. The following are the experiments in part:

1. Determine the weight of 1 cc. of water by weighing several different volumes of water.
 2. Ordinary solutions (weight and volume).
 3. Oxygen in the air (pyrogallic acid method).
 4. Percentage of oxygen in potassium chlorate.
 5. Preparation of standard solutions, and determination of weight relations between alkalis and acids.
- Law of definite proportions.
6. Analyses of hydrochloric acid by electrolysis and by decomposition of the gas with sodium amalgam.
 7. Determination of weight of acid required to dissolve a given weight of metal.
 8. Determination of combining weights for magnesium and iron: (a) by measuring hydrogen evolved; (b) for magnesium, by ignition.
 9. Oxides of nitrogen and reactions with oxygen. Volumetric proportions.
 10. Analysis of ammonia gas by chlorine.
 11. Water of crystallization.
 12. Density of chloroform vapor by a modification of the Victor Meyer method.

With the methods used in the above list of experiments it has been the experience in Detroit that at least consistent results may be required from a class of pupils. As twenty or twenty-five students work the experiment simultaneously, this consistency of results is believed to be important, and always awakens a lively interest in the pupils. Tabulated records on file for the past year show that results need not vary from each other by more than 1 per cent., and generally may be kept within a fraction of 1 per cent. of the theoretical result. Question: Is it the opinion of any of the teachers present that the above amount of purely quantitative work is too great for a year's course?

DISCUSSION

MR. A. C. NORRIS, of Minnesota.—In analyzing simple minerals, the student should be required to prepare the chemicals used in analysis. A quantitative synthesis should be made, using the chemical equation as a basis.

MR. NEWMAN, Cincinnati.—The number of quantitative experiments is not important. In general, I should say, the fewer the better. It is, however, a question of training for the student. The experiment which "comes out" easily according to theory should not be selected for this reason alone. It should form a vital part and occupy a logical place in the year's work as a whole. We should by all means choose the experiment that we can adapt to a general discussion of principle and to the scientific training of the student.

I think the mathematical aspect, the aspect of practical mathematics, is of the greatest value in training a logical habit of thought. Pupils know mathematics, but do not know how to apply its principles to science. This phase suggests an important opening for general discipline.

MR. LINEBARGER.—I have noticed the failure of the students' mathematics in dealing with chemical problems.

This question of the correlation, or the lack of it, between mathematics and science brought out a general expression from the teachers. Difficulties along this line are now regularly anticipated and provided for by science teachers.

MR. HEACOCK, Topeka, Kan.—My pupils are frightened by a proportion or a fraction in chemistry. I do not think that the fault is with the teachers of mathematics, because the pupils do know their algebra and geometry. I do not know where the trouble lies.

MR. NEWMAN.—It cannot be a case of having forgotten their mathematics, because pupils in my classes have been studying advanced algebra and geometry at the same time with their science.

MR. COURTIS, Detroit Home and Day School.—I find the following remedy effective: I give my classes a lesson on the mathematical question involved.

MR. WHITNEY, Saginaw, Mich.—Does this question of mathematical difficulty apply only in connection with quantitative experiments?

Answer: It seems to be the general experience that the same difficulty arises in the discussion and application of most chemical laws.

MR. PETE, University of Michigan.—The difficulty does not arise from the student's lack of knowledge of his mathematics. I require my students to make up standard solutions of alkalis; then, by titration with known acids, to determine whether the alkali solution is exact. These same people are students in calculus and geometry, but the question above mentioned always causes difficulty.

MR. ADAMS, Providence, R. I.—I should like to offer as a suggestion an expedient that has proved useful to me. My students substitute x or y for the unknown quantity.

This brings them to familiar mathematical expressions. Now, further, it appears to me that in science, teachers have one of the rarest opportunities in the whole field of education. It is to bring into correlation the two subjects, science and mathematics.

MR. PARSONS.—I would go back to mathematical texts and ask for better problems there, i. e., examples in science.

MR. LINEBARGER.—The trouble with the expedient is that we should be obliged to get a new set of teachers in mathematics. An example comes to mind from my own experience with calculus. In order to understand the calculus, I had to study physical problems involving the methods of the calculus. I finally got out a text-book composed largely of physical problems; but, as the book has had a very limited use, I judge that this expedient is not successful.

TOPIC II. THE IONIZATION THEORY

MR. LINEBARGER said in substance: I am an ardent advocate of the ionization theory in the presentation of certain parts of elementary chemistry, and have employed it with success for several years. With a few simple experiments and demonstrations the electrical part of the theory may be made clear to those who have not studied electricity, so that a knowledge of physics is not a necessary prerequisite. I lay but little stress upon the electrical part, but apply its chemical aspect to a variety of cases. Students readily learn to think in terms of the theory, and things that seemed obscure when presented in the old way now appear quite plain. Anyone who will systematically and thoroly use this theory in his teaching will find it of so great value that he will not willingly relinquish it.

MR. PETE.—I am pleased with the results of teaching the ionization theory. We use Torrey's *Chemistry* as a guide. He explains dissociation, the electrolysis of water, etc., clearly and simply.

MR. LINEBARGER.—Torrey is a good book for teachers. It is not a book for elementary students.

MR. NEWMAN.—Would the order of precedence of physics and chemistry influence the explanation of electrolysis of water?

MR. LINEBARGER.—Lack of physics does not affect the power of the student to understand the explanation of the electrolysis of water.

MR. C. F. ADAMS, Detroit.—Do I understand you that in general you do not care especially to have physics precede chemistry?

MR. LINEBARGER.—My own chief reason for wishing physics to precede chemistry is that we are then enabled to get the students when they are a year older and farther along in scientific thinking. Of course, with pupils unprepared in physics considerable time must be spent in studying certain purely physical laws.

MR. PARSONS.—It is as easy to teach physics to chemistry classes as it is to teach chemistry to physics classes.

Several teachers could not agree with this latter position.

TOPIC III. THE CHEMICAL LIBRARY

MR. WHITNEY, Saginaw, Mich.—What method of using the chemical library will bring the best results?

MR. LINEBARGER.—Put the books in the student's way. Do not have them in a little room by themselves. The books will not be consulted freely in that case. Have the books where the student must stumble over them in order to get out of the room. I have some French and German texts. It pleases the pupil to find that he can apply his knowledge of language in reading a foreign text.

MR. PETE.—My experience shows that references to laboratory manuals in the latter part of the year are useful.

After obtaining the roll of members present, the conference adjourned at 6 P. M.

The conference was one of exceptional interest to all present. Judging from the friendly criticism and comparison of methods used in widely separated localities, the discussions could not fail to prove of real help and suggestion. The central idea suggested by the conference as a whole may be stated in a word: The most important object in teaching chemistry should be to develop in the student a logical scientific habit of thought. By this standard every topic and experiment in elementary chemistry should be judged. The topics and experiments which meet this standard and make chemistry an essential integral part of the student's education will be adopted by progressive teachers. In discussing the mathematical difficulties in chemistry, Mr. Adams sounded the right note: In science, teachers have one of the rarest opportunities in the whole field of education. It is to bring into correlation the two subjects, science and mathematics.

GEOMETRY CONFERENCE

LEADER — ALAN SANDERS, TEACHER OF GEOMETRY, HUGHES HIGH SCHOOL,
CINCINNATI, O.

[SYNOPSIS OF OPENING REMARKS BY THE LEADER]

Geometry was a science in form as perfect as it is today long before the Christian era. As Minerva sprang fully armed from the brain of Olympian Jove, so Euclidian geometry comes to us fully developed from the schools of ancient Egypt and Greece.

In the schools of our English-speaking cousins across the water the definitions, axioms, and sequence of the propositions of Euclid are strictly adhered to. We Americans who believe in progress, while still teaching Euclidian geometry in substance, have made many changes in the sequence of propositions, in definitions, and even in the axioms. The question whether these changes are always improvements on the text of Euclid seems pertinent.

One of these changes is the use of the term "angle." This term is variously defined as "the difference in direction of two lines that meet," "the amount of divergence between two intersecting lines," "the opening between two lines drawn from the same point," etc. Is it consistent with any one of the above definitions to speak of "an angle intercepting an arc"?

The next point is the definition of "tangent circles." A definition that has come into very common use is: "Two circles are tangent to each other if both are tangent to a straight line at the same point." Now, I submit that two circles are tangent to each other when, as the language indicates, they touch each other, and that the statement, "Two circles are tangent to each other if both are tangent to a straight line at the same point," is the statement of a proposition, and should be proved.

A third point is looseness in expression of the statements of propositions. This may be illustrated by the statement: "At a given point in a straight line a perpendicular to the line can be drawn, and but one." Now, I know of no way to prove that a perpendicular can be drawn to a line other than to give the construction for its erection. I think it would be fairer to place all constructions not proved under the list of postulates.

This leads up to my fourth point: Are these "assumed constructions" or "stealthy assumptions," as one author is pleased to denominate them, conducive to strict, rigorous reasoning? Should we allow a pupil to give the construction of a problem at the end of Book II or III, unless he traces back every authority used in that problem, and shows that it in turn does not depend upon a proposition that has assumed the very construction that he is proving? Have you ever done this yourself? Try it.

The introduction of the modern theory of limits is certainly an improvement on the Euclidian method; but the theory of limits must be handled with care.

In this connection I would ask your consideration of the following question: Is it correct to attempt to prove the proposition, "Triangular pyramids having equal altitudes and equivalent bases are equal in volume," without first proving the proposition: "The volume of a triangular pyramid is the limit of the sum of the volumes of a series of inscribed or circumscribed prisms of equal altitude, if the number of prisms is indefinitely increased?"

The questions I have proposed for discussion seem to me to be very one-sided, but, as my views on these subjects are opposed to the majority of the texts on geometry published in this country, I am convinced that you will have much to say on the other side. It is not the purpose of the chair to confine the discussion to these questions, but any teacher present is invited to present for discussion any question relating to the subject of geometry or its teaching.

DISCUSSION

In the discussion that followed the opening remarks of the leader the points suggested were discussed, and, in addition, the methods, aims, and ideals of the teacher of geometry and the advantages of the heuristic method of instruction, tho the time was altogether inadequate to the purpose.

PROFESSOR EVANS, of Boston, called attention to the fact that the vital propositions in geometry, those that are really essential to a complete system, are comparatively few, and that a carefully selected collection of such propositions would be of great value to teachers and students of geometry, as furnishing a common basis of reference and a syllabus that may be used in examinations for admission to college.

It was agreed that a committee should be appointed to draft such a syllabus. This committee was composed of the following members: Professor George W. Evans, of Boston; Professor L. D. Remington, of Fenton, Mich.; Mrs. Milner, of Detroit; Professor Alan Sanders, of Cincinnati; Miss Ackerman, of Bay City, Mich.; Professor Harlan, of Dayton, O.; Professor William H. Lynch, of Mountain Grove, Mo.; and Mrs. F. Temple, of Chicago. These were empowered to call upon any others to assist them in this important work. The result is to be presented to the Geometry Conference at the next meeting of the National Educational Association.

HISTORY CONFERENCE

LEADER — J. J. SHEPPARD, TEACHER OF HISTORY, DEWITT CLINTON HIGH SCHOOL,
NEW YORK CITY

General topic: "The Nature and Aim of History Work in the Secondary School."

Introducing the discussion, Mr. Sheppard referred briefly to the former indeterminate, low status of history and history teaching in secondary schools, as compared with the present assured position of the subject in the curriculum and the dignified status of the teacher of history. There is much to be desired in the way of improvement, but progress has been made and is making, so that the future development of strong work in history is assured.

E. W. CASTLE, professor of history in Teachers College, Columbia University, New York city, presented a paper on "History as a Study of Life," of which the following is an abstract:

Until the middle of the nineteenth century the subject-matter of history consisted of court intrigue, personal adventures, wars, revolutions, and political incidents. With the development of historical study and investigation during the last half-century, art has

given place to truth, imagination to fact, vividness of narration to accuracy of statement. Amount and minutæ of detail alone cannot reasonably be expected to give a realization of life. The history which pretends to portray life must not alone give the details of life, but must give them in such form as to be easily, accurately, and readily recognized in the imagination of the reader. It is to be feared that the study of documents, from which alone a genuine and unwavering zeal for historic truth can be derived, has drawn some away from the realities with which history has to deal. The study of human life has given place to the study of the form in which human life has been portrayed. "Documents are the traces which have been left by the thoughts and actions of men of former times."

Texts, notes, reference work, map-drawing, themes, outlines, notebooks, etc., have each in turn in various schools constituted the study of human life. It is peculiarly hard to subordinate methods and devices to their proper place and rank when teachers are judged by results, and that, too, visible and tangible results chiefly. The lack of imagination, and a misconception of its nature and function, also contribute largely to giving false emphasis and bad proportion. In daily life, as also in scientific pursuits, the part played by the imagination is universally underestimated, possibly because the creative power of the imagination and its relation to things already perceived are not understood. Wherever truth is dependent upon the relation of things to each other, there the imagination is absolutely indispensable; hence in history its necessity. Even in the minds of those who regard the study of history as a science the imagination is a necessary and indispensable piece of mental furniture; it alone gives the reality. But how, pray, may we reasonably expect pupils to apprehend the reality when the teacher himself does not perceive it? The failure on the part of both teacher and pupil to realize just exactly what humanity is and means takes away the sense of life from history teaching, perhaps more than any other thing.

History has to deal with human beings as they are, not as they might or should be. "A condition, not a theory," confronts one on every page. When we discuss the possibilities of Rome's still being mistress of the world, had she adopted a different system of colonial administration and a different treatment of the Roman populace, we are in the realm of speculation pure and simple. The historical query is: "Why did she follow the course which she did; what was the course; how did it result?" not: "What might have happened had she done otherwise?" Rome was composed of human beings acting as human beings act. Rome was what she was because they were what they were. Human beings are subject to all of the virtues and vices known. This mixture of good and evil crops out constantly. Human beings are further characterized by the power of consecutive, continuous, and self-directed thought. The striking thing about historical thought is that it has been rational and logical according to the ideas of the time. Motive is the mainspring of action. Behind historic deeds lie ideas and motives, conscious and unconscious. The vital thing is to discover which are the efficient motives and how they produced action.

"And they lived" are the words of the text of the teacher of history. They should ring in his ears continually.

DISCUSSION

WILLIAM SCHUYLER, assistant principal of the St. Louis High School.—What is your method of making history live in your class-room work?

PROFESSOR CASTLE.—A sense of the reality of the historical events themselves, an understanding of human life as such, as found all about us today, together with illustrations from everyday life, are about the best resources of the skillful teacher. Well-timed anecdotes (not anecdotage) often serve to drive home a truth.

EUGENE W. LYTTLE, inspector of the University of the State of New York, department of history, asked what subject-matter is best suited to children from eight to twelve years of age.

PROFESSOR CASTLE replied in substance that the practice in the Horace Mann School (of the Teachers College) is to present in the fourth grade biographical subjects from American colonial history, beginning with Virginia, going then to Massachusetts, and ending with New York. In the fifth grade, biographies from Greek and Roman history are presented. In the sixth grade a transition is made from biographical study, thru mediæval history, to political history proper. The mediæval period seems to lend itself to this process of transition, and the general plan has worked well thus far. United States history is given last of all, in the seventh and eighth grades, with some discussion of economics. The work has assigned to it three periods a week, each year, in five grades, fourth to eighth inclusive.

MR. SCHUYLER spoke of the necessity of omnivorous reading and constant thinking on the part of the teacher, and of the need of bringing out constantly the relations of cause and effect in historical events.

MISS FLORENCE POMEROY, teacher of history in the Ann Arbor (Mich.) High School, spoke of the value of the historical novel in causing interest in the subject.

MR. LYTTLE thought the historical novelist might be a truer historian than the professed writer of history.

MR. SCHUYLER took much the same view, holding that the teacher may easily correct wrong impressions given by the novelist.

MISS GUTHRIE, of St. Louis, teacher of the blind, spoke of the information and delight afforded the blind pupils thru Irving's books. Historical novels could be used very freely to great advantage.

MR. BURNHAM, of Pennsylvania, urged that the selection of material is all-important. Any and every bit of material, whether found in novels, poems, selections from standard historians, or in any other place, should be used. A text-book made of selections from Parkman, and other equally interesting and standard authors, is very desirable.

C. L. MCCARTHA, professor of languages, State Normal College, Troy, Ala., urged the desirability of correlating history with geography and with other subjects. Historical novels frequently have interested students and led them to serious study and research.

MISS BAYLOR, of Wabash, Ind., said that excellent results had been reached by a sociological and economic study of Greek life as a preparation for the study of Greek history.

H. L. WILSON, principal of the Sioux Falls (S. D.) High School, pointed out the danger of attempting to illustrate past life by the life about us at the present day. It is dangerous to illustrate the Punic wars by references to the Spanish-American war of 1898.

W. H. NICHOLS, professor of history, University of Colorado, suggested the inadvisability of relying much upon historical novels. The nature of the study of history in the secondary school might possibly be determined by making it an interpretative study of significant facts. The nature of the learning mind itself will determine what facts are significant during the adolescent (secondary) stage of school instruction.

MR. SHEPPARD, in closing the discussion, pointed out the limitations of the use of the historical novel. The novelist, of necessity, seizes upon the most dramatic incidents. These may or may not have historical significance. In any event, their very interest in and of themselves is sufficient to attract attention to them. They do not require further emphasis or elaboration. The historical novelist cannot at best present more than a picture of general conditions, and this is apt to be so interwoven with his story as to be of very small value to the student relative to the time required for reading the novel.

PHYSIOGRAPHY CONFERENCE

LEADER—W. H. SNYDER, TEACHER OF SCIENCE, WORCESTER ACADEMY,
WORCESTER, MASS.

[SYNOPSIS OF OPENING REMARKS BY THE LEADER]

We Americans of all nations should be students of geography. Our isolation, extent of territory, commercial and expansive spirit, make it expedient that we should acquaint ourselves, in all ways possible, with the rest of the world. Altho the American is by nature a traveler, yet our home geography extends over such vast distances, and the oceans so effectually shut off our shoulder-to-shoulder intercourse with other nations, that it is only thru study that the most of us will ever be brought to appreciate the conditions of other peoples. These conditions must be appreciated, if we are ever wisely to take the position for which we as a nation seem foreordained. This appreciation will, however, never be attained by a purposeless or aimless study.

Then, too, if ever geography is to attain a commanding position in our educational system, it must show its value as a disciplinary as well as an informational subject. The simple acquiring of information does not train citizens. The why and the because must play as important a part as the behold and the remember. Probably most of us can remember when physics and chemistry were taught entirely from books, and consisted simply of a mass of information which was accepted on authority. During the past few years this kind of presentation has been superseded by a rational method, and I believe we are destined to see in the near future the same rational method applied to geography. To attain its highest efficiency, geography must become, to a considerable extent, a laboratory subject in which actual work is done, and the principal use of the text-book is as a guide and fount of reference, and not as something to be learned and recited.

The government during recent years has gone to great expense in making contour maps of different parts of the country. How many of our educated people even are able intelligently to use these? What does great circle sailing mean to the average student of geography? We use maps and charts and models and globes in a very glib way, and never take the trouble to show how these are made and what they really express. The aim in geography should be to impart a scientific knowledge of the surface of the earth. This scientific knowledge, however, is not general information. It is the experimental knowledge which enables us to understand fully the expressed results of others, to appreciate the geographical details of a photograph, to understand exactly what sort of topography is represented by a contour map, to form a mental picture of a region when properly described, and by means of photographs, maps, and description to appreciate and to explain the phenomena discovered. It is necessary, therefore, to have a material equipment for the teaching of geography. There must be an actuality about the subject, not a mere hearsay. Chicago, by its school museum which it has prepared to move from school to school, is the first city to supply one of these needs.

The larger part of the apparatus of this subject has not yet been invented, and it devolves upon those who are today teaching the science to construct and bring together the tools. The first decade of the twentieth century will see this done. The fields are white for the harvest, but the laborers are few.

PHYSIOLOGY CONFERENCE

In the absence of the leader, Mr. James E. Peabody, teacher of physiology, Peter Cooper High School, New York, President W. J. S. Bryan conducted the conference. His remarks were as follows:

We regret exceedingly that the gentleman appointed to lead this conference has been prevented by sickness from attending. We regret this the more because he would have spoken of that which he himself has learned by actual experience. It is sometimes asserted that physiology should not be taught in secondary schools, because it cannot be taught in such schools in a scientific way or by the laboratory method. The age of the pupils and the feelings or prejudices of pupils and parents prevent its presentation after the manner employed in medical colleges. Dissection of animals is repugnant to most pupils of high-school age, and it is not to be supposed that it would be at all suitable or possible to study physiology by the dissection of the cadaver. The disgust aroused by the sight and touch of the muscles and organs of dissected animals is largely sentimental and may be overcome by the awakening of a truly scientific spirit of investigation. The similarity of the structure and organs of other animals to those of the human species makes it possible easily to secure from the market-house the specimens necessary for a laboratory treatment of the subject. The human skeleton, from frequent presentation, has largely lost its offensiveness, and the study of the bones can be pursued with but little opposition in the mental attitude. The lens, the stereopticon, the microscope, the microtome, the slide, may be made to serve the same useful purpose as in botany. The subject, tho' at first to some not pleasing, with proper treatment may be relieved of its repulsiveness, and from the very fact of its nearness to the pupil may become interesting and attractive.

Physiology has long been accorded a place in the curriculum of the high school. Its importance has been recognized, but those who have taught it have not as yet devised the means for its study by the methods now regarded as essential to proper scientific teaching. That the same thing can be done for physiology as has been done for botany and physics and chemistry is not to be questioned.

It is for those who are present to outline for the help of each other the methods they have found serviceable and to describe the devices they have invented and contrived for the scientific study of physiology by the laboratory method. In this science, as in others, it must be borne in mind that in the high school the elements of the several sciences are to be taught in a truly scientific way. It is not for the high school to teach physiology as it is taught in the medical college. If teachers of physiology would secure for their study the recognition its importance deserves, they must teach it in such a way as to command respect.

DISCUSSION

DR. LOUIS MURBACH, Central High School, Detroit, Mich., expressed the opinion that, while it is more difficult to teach human physiology in high schools by the laboratory method, the combination of physiology, hygiene, and sanitation can readily be treated in this way, because it is more amenable to experimentation, and material for laboratory work can easily be obtained. He considered this combination of subjects desirable for high-school work under the name of physiology. He laid stress upon the division of time between laboratory and recitation or demonstration work, claiming that at least half the subject should be taught by the laboratory method. The laboratory work should be done in connection with the text and preceding each subject. Thus, the study of the vascular system and the functions of the blood may be preceded by observing first the vessels in a living earthworm, then the blood-flow in a frog's foot, and so on. When physiology is properly taught, it should be recognized by higher institutions as an equivalent of a zoölogy course covering the same time. The youth of the pupils who study physiology increases the difficulty of properly presenting it.

MRS. L. BASSETT, of Detroit, spoke of the difficulty of teaching physiology to pupils of the ninth grade on account of their immaturity and the consequent trouble they have in grasping the subject or in understanding the text.

MISS E. PETTIE, speaking from her own experience, favored the use of the laboratory method in teaching physiology.

T. O. MAST, Holland, Mich., gave his experience in the introduction of a laboratory course in physiology. He found Peabody's *Laboratory Exercises* an admirable book for the purpose. The course was entirely successful, and need not cost more than twenty-five cents for each pupil. He emphasized the fact that the text-book should not be neglected, but should be used fully half the time, after the observation and experimental work.

DR. F. BARROWS, Central High School, Buffalo, N. Y., was asked to give his opinion as to the proper sequence of zoölogy and physiology. He thought that, from the standpoint of zoölogy, physiology should come first, tho much physiology can be taught in a course of zoölogy.

S. B. MCCracken, Buffalo University, suggested that the pupils might study physiology thru the medium of their own bodies. The pupils might learn much by a careful examination of themselves and each other. The boys could furnish models for the class, or boys might examine boys and girls examine girls.

MISS GRACE ELLIS, Central High School, Grand Rapids, Mich., described a spirometer of simple construction, consisting of an inverted bell jar filled with water and balanced in a glass vessel of water by means of weights and pulleys, and having a tube entering from below, thru which, by means of a rubber hose, the air from the lungs might be forced into the jar. On the side of the outer vessel there is pasted a scale to show the amount of air forced into the inverted jar.

DEPARTMENT OF HIGHER EDUCATION

SECRETARY'S MINUTES

FIRST SESSION.—WEDNESDAY, JULY 10, 1901

The Department of Higher Education met in Room No. 314, Central High School, at 3 P. M., the president, Charles F. Thwing, president of Western Reserve University, of Cleveland, O., in the chair.

Music—vocal solo, "In Maytime" — Miss Clara Vollbreche.

The first paper—subject, "The Function of the State University"—was presented by President R. H. Jesse of the University of the State of Missouri.

The paper was discussed by J. H. Canfield, librarian, Columbia University; President William F. King, Cornell College, Iowa; President William L. Prather, University of Texas; President Miller, Ruskin College, Missouri.

By vote of the department, Dr. J. E. Gilbert, of Washington, D. C., was given an opportunity to present the interests of the Society of Religious Education. He extended an invitation to the members of the department to attend the meeting of said society Thursday afternoon.

Professor John William Perrin, of Western Reserve University, presented a paper on "The Rise of National Education in the Sixteenth Century."

Professor Elmer E. Brown, University of California, and Professor F. C. French, of Vassar College, spoke in discussion.

The following Committee on Nominations was appointed by the president:

William F. King, Cornell College, Iowa.

F. C. French, Vassar College, New York.

Samuel G. Derby, Ohio State University, Ohio.

The department adjourned.

SECOND SESSION.—FRIDAY, JULY 12

The department met in the Central High School at 3 P. M., and was called to order by President Thwing.

Music—vocal solo, "Angus Macdonald," *Roeckel*—by Miss Minturn.

William E. Chancellor, superintendent of schools, Bloomfield, N. J., read a paper on "Education for Social Control."

Questions were asked, and remarks on the paper made, by Charles C. Ramsay, principal of high school, Fall River, Mass.; Miss Pomeroy, Ann Arbor, Mich.; J. L. Goodknight, of James Milliken University, Illinois; and Walter H. Nichols, of the University of Colorado.

"The Moral Element in Education" was the subject of a paper read by W. H. P. Faunce, president of Brown University, Providence, R. I.

The Committee on Nominations reported as follows:

For *President*—W. H. P. Faunce, Brown University, Providence, R. I.

For *Vice-President*—C. W. Dabney, University of Tennessee, Nashville, Tenn.

For *Secretary*—John William Perrin, Western Reserve University, Cleveland, O.

The report was unanimously adopted and the officers declared elected.

The meeting then adjourned.

WM. H. BLACK, *Secretary*.

PAPERS AND DISCUSSIONS

THE FUNCTION OF THE STATE UNIVERSITY

RICHARD HENRY JESSE, PRESIDENT UNIVERSITY OF THE STATE OF MISSOURI, COLUMBIA, MO.

Wherever in this paper the word "university" occurs, it means state university; wherever the word "college" is used, it means a private or denominational institution. Let me describe the function of the state university as it appears to me.

I. It should be *within* :

1. Non-partisan, but patriotic to the state and to the nation.
2. Non-sectarian, but religious.
3. Free as to tuition in all departments, academic and professional.
4. Every inch a university.

1. While the obligation named first binds every institution of learning in our country, it binds the state universities in a peculiar degree. Their foundations are federal land grants. The funds for their maintenance come from their respective commonwealths. In the highest and broadest sense they should be nurseries of patriotism, but they should shun partisan politics as they shun death.

2. Non-sectarian, but religious.

The state universities have not yet realized their opportunity for developing in students a life that is religious and yet not sectarian. Freedom from denominationalism is apt to be construed as license to subordinate unduly religion in education. No good reason appears why the universities should not each maintain one professor, at least, to lecture upon sacred literature, natural religion, and practical morals, and to serve as chaplain of the students. If, unfortunately, the law or constitution forbids such teaching at public expense, an appeal should be made for an endowment by private benefactions. What a blessing for a long time has Dr. Peabody been to Harvard! Such a man ought to be at every seat of higher learning.

Moreover, why should not a large state university maintain a department of theology, without which it is not complete and which does not belong necessarily to any denomination. In Germany, in spite of an established church, theology is non-sectarian. Men of all creeds go there for training. Why should not our American state universities show that ethics, religion, and even theology of the highest and best type may be divorced entirely from denominationalism?

3. Free as to tuition in all departments, academic and professional.

This proposition ought to be established by the mere statement that

in every commonwealth the university is the head of public instruction, which is free up to the higher learning and ought to be free there also. The reasoning that people have indulged in as to free tuition is very curious. In early times the doctrine was preached that schools should be maintained at public expense, but should be limited to the elements of learning—reading, writing, arithmetic, geography, and United States history. A little learning the public might give the individual, but no more. After strenuous opposition, this doctrine was established in New England, in the middle states, in the West, and finally in the South. Then came the second step forward, in which in many places high schools were smuggled in. In Kansas City, for example, the first high school, now one of the best in America, was for years maintained rather surreptitiously. Later the people thruout the union came to the belief that a chance at secondary education also, without charge for tuition, was due from the commonwealth to every soul on its soil; but it was still argued generally that college or university training should be paid for by the individual. Not long ago some western states reached the third stage of progressive belief, that free instruction should be given thru the college of liberal arts, but that professional training should be paid for. In the process of evolution, however, the fourth era is near at hand, in which it will be recognized, I think, that the discrimination between academic and professional instruction is wholly specious. If it be granted that the state owes to every soul on its soil a chance at free instruction thru the college of liberal arts, by what legerdemain of logic can it be denied in medicine or engineering? In these so-called professional courses, perhaps half the studies are academic and the other half are applications of the academic. Is it reasonable for the state to teach a man freely physics, chemistry, mechanics, drawing, and mathematics, but refuse to teach him freely their applications to engineering? Should one learn at public expense such academic subjects as physics, chemistry, neurology, embryology, anatomy, histology, physiology, physiological chemistry, and bacteriology, but learn at personal expense their applications to medicine? All such reasoning is, to my mind, artificial. It is said that law, medicine, and engineering are gainful pursuits, and, therefore, the beneficiaries should pay for training in them. The argument is not worth refuting, but, if it were, it might be pointed out that bachelor of arts is a gainful degree. Moreover, academic graduates are not more useful to the people than are lawyers, physicians, pharmacists, dentists, engineers, etc., of superior quality. As soon as you admit that the commonwealth must furnish its people free instruction in any degree, you are compelled to admit that it must furnish free instruction in every degree and in every useful form. But the same argument, it is said, might be advanced for free clothing or board or books. To my mind this does not follow at all, but if any man will demonstrate that they

should be furnished in any stage of education, it would be easy to prove that they should be furnished in every stage thereof and in every useful form.

It is questionable whether, in view of the superb training at Harvard, Massachusetts is bound to found a free university, but, in my opinion, she is bound to give her citizens that desire it, and are prepared to receive it, free instruction in some accessible university of high rank. Whether free tuition should be extended by one state to citizens of another is a question that I will not now discuss. Those who, like the writer, exalt the nation above the state will favor it.

In closing this division of my subject, let me say with emphasis that free tuition in any department without high standards of admission and of graduation is akin to crime.

4. Every inch a university.

There is danger that, thru eagerness to take in new territory, to swell enrollments, and to provide instruction for special classes, some of our universities may forget that to deserve richly their titles is the highest obligation they owe to the people. Policies of expansion and adaptation are sometimes commendable, and occasionally are forced upon us by circumstances, but they take money and subtract from the energy due to higher teaching. Never should they be allowed for a moment to obscure the main purpose, which is to be, from circumference to center, a great university. Particularly objectionable is the tendency, too often exhibited, to swell enrollments by adding professional schools in the nearest metropolis. These *morganatic* unions rarely bear good fruit. A university is much more than a college, or an aggregation of them. Its great work is graduate and professional studies, based upon an academic degree. To attain this end is far harder when the work is not concentrated on one campus.

II. The university *without* should care for the state, and should serve as a buttress to a national university.

It has been preached strenuously that the state should care for its university, but scarcely has the idea been broached that the university should care for the state. It is possible to do this in a variety of ways, in material, in social, in political, and in spiritual things. The possibilities in spiritual things have been discussed in the second paragraph of this paper. What can a great seat of learning do for the public good in other directions?

1. Thru the college of agriculture, or in conjunction with it and other public agencies, it should look after the material welfare of the people.

The loftiest learning should not scorn to help men in their material interests. If in its laboratories a dietary can be discovered whereby the fattening of swine is made cheaper to swineherds, the university should

promulgate that dietary. The Babcock milk test, discovered at the University of Wisconsin, has been a blessing to dairymen in all the world; and almost as beneficial to another class of husbandmen has been the discovery in the University of Missouri of a method of inoculating cattle against Texas fever, whereby the mortality in blooded animals carried south has been reduced from 90 to less than 8 per cent. Our colleges of agriculture have devised better dietaries for domestic animals than the wit of medicine has yet invented for growing children.

Expeditions have been sent out by our universities to measure accurately remote water power, and to survey routes for transmitting it electrically to railway stations; to measure beds of coal and test their thermodynamic values; to measure beds of cement and quarries of stone, and try their quality; to collect flora, fauna, rocks, and minerals; and for other useful purposes. The results, carefully tabulated, have been widely distributed. Diseases of animals and plants have been held firmly in check. What has been done shows what may be done for things material by the scientific skill of universities. But what has been accomplished has been mainly along the paths prescribed by the United States in the Hatch Act, establishing agricultural experiment stations. Except under federal leadership, our universities have not done very much, I fear, for the material welfare of the people, when one considers the immense possibilities.

2. In collaboration with state boards, bureaus, and commissions, the university should look after social and economic conditions.

How many states can point with pride to their penal institutions — their jails, penitentiaries, reformatories, almshouses, tenement houses, and asylums? Yet the university of each commonwealth perhaps maintains a chair of sociology. On the campus are students from every county. In their summer vacations they could visit every reformatory and eleemosynary institution, reporting accurately its condition. A judicious publication of the results, with a statement of fundamental principles, would lead often to radical reforms in the treatment of the criminal and defective classes.

No state is without municipal problems, and few can boast of a rational system of taxation. Why should not the department of economics take up these subjects? If the professors understand what scientific taxation is, why can they not apply it wisely to prevailing conditions? The wisest teaching of political economy in municipal problems should be spread broadcast. The federal government maintains in every commonwealth an experiment station to find out what is wise in agriculture, and to disseminate among the people the knowledge gathered. The departments of sociology and political economy ought to be experiment stations after their kind in the full meaning of the federal government, and the university should not begrudge the cost of publishing and

distributing among the people whatever information may be necessary to enable them to adjust wisely their systems of taxation, to solve municipal problems, and to improve the condition of their penal institutions, reformatories, asylums, almshouses, tenement houses, etc. It is the function of a university to investigate, to teach, and to publish.

A painstaking study of the state laws, in the light of the broadest learning and in comparison with other codes, if embodied in timely publications and spread broadcast, would not be without good results anywhere. The achievements of David Dudley Field in this direction are well known.

The early history and archæology of every state is an inviting field for investigation, while the editing of early local writers of the better sort might well employ some of the literary skill of the faculty. A *spicelegium* in some cases it might be, but in every case it would be valuable.

The departments of chemistry, sanitary engineering, and medicine find a wide field of usefulness in things pertaining to public health : pure foods and drugs, pure water, good sewers, the ventilation of buildings, and so on. In this broad direction it is possible, by scientific work and by helpful publications, to diminish sensibly the rate of sickness and of death.

3. In co-operation with boards of education and the state superintendent, the university should build up the schools below it.

The writer has talked on this subject so often that he feels inclined now to dismiss it hastily. Elementary schools cannot be brought to efficiency, unless there be high schools to lead them, and high schools cannot become ideal without the help of a university. The whole system of public education, from the kindergarten to the graduate department, and thru it, should be strongly knit together. This principle is accepted universally, the chief discussion being about instrumentalities. My own experience causes me to place high value upon examiners of schools appointed by the university. The examiner should be an instructor or assistant professor of pedagogy, and should lecture sometimes on the campus. In large states it might prove convenient to have an examiner for town high schools, another for rural schools, and a third for elementary schools. The examiners should all be extension teachers of practical pedagogy. Their function is not so much to examine as to build up. If the university will pay for the cost of this service, the money will come back twofold. As an example of what may be done by an institution for the schools below it, let me point to the University of the State of New York. Few universities could engage in all its manifold work, but according to our means we should adopt its best methods. Traveling libraries, galleries, and extension lectures, as well as examiners of schools, are educationally important means of grace.

Moreover, the university is not without obligation to the private and

denominational colleges which, chartered by the state and protected by its laws, teach a large percentage of the educable youth. It is a blunder of the first magnitude to assume toward these colleges an attitude of hostility. One of the best things that we have tried in Missouri is the college union, consisting of the university and of every other respectable institution of higher learning. At the meetings, held at each institution in succession, we discuss common problems, talk of common troubles, and help one another to the common end—the uplifting of the people. In spite of provoking opposition occasionally from the churches, any university should be held largely responsible if bad feeling continues between the denominational colleges and itself. Stepping grandly over small animosities, it should remember that, while officially it is the head of public instruction alone, in a broader sense it should be the loving, helpful head of all sound education in the commonwealth.

The state university should serve as a buttress to a national university.

Education will not be complete in these United States until we have at Washington a national university with state institutions as its buttresses. Some day our education will conform to our system of government. I for one would not be willing to see institutions of any class enjoying privileges in the national university that are denied to other institutions of equal or superior grade, but close affiliation between the state and nation seems inevitable in education also.

Let me answer some possible objections to the positions taken in this paper as to the outward obligations.

Should the university invade the provinces of the boards, bureaus, and commissions—the Geological Survey, the Natural History Survey, the health officers, the tax commission, the superintendent of public instruction, and the college of agriculture and the school of mines, if, unfortunately, these stand on separate foundations? If the interests of the state are adequately served by others, the university might let well enough alone. Under no condition should it officiously invade the territory of any officer or organization appointed by the state. But 99 per cent. of the difficulty will disappear if only the university will do the work admirably and let others take the credit. If the purpose be to promote public welfare, why should one care who gets the praise? In every instance, hitherto, in the writer's experience, the scientific, philanthropic, and statistical departments of the state and the nation have been eager for co-operation, wherever the university has demonstrated ability to do work superbly, and in most cases they have supplied the money. Besides, it is one thing to appoint commissions and quite another to induce them to fulfill strenuously the purposes for which they were appointed. Many a yawning gap of deficiency in public officials may be quietly bridged by the patriotism and skill of the university, which should be the eye of the people, searching in every direction for opportunities to serve their welfare.

Will not the discussion of social and civil questions embroil the university in partisan politics? The most important problems of sociology and politics are not often embodied in state platforms, which usually consist of the national structure with a few more planks lauding one party and vilifying the other.

Do you ask where the money for all this is to come from? False to the core is the idea that the resources of a university are solely for instruction on its campus. The administration has no right to wait always on needed investigations for special appropriations from the legislature. It should rather assume that in part the income must be consecrated, as need arises, to promoting the public good wherever it can be reached by scientific skill. Ultimately no use of money will pay better, even as an investment of capital. At last, we are not required to do more than our resources permit. It is the spirit that maketh alive. The important thing is for the university to construe its functions liberally and to choose intelligently what can be done now and what should be postponed. Time as well as money is necessary for perfect performance of its whole function.

In conclusion, let me say that the state university, founded by the federal government and supported by a mill tax upon the property of a great commonwealth, with broad outlook and intense devotion to the welfare of the people, can be made the best institution yet devised by the wit of man for the promotion of human progress. University mottoes are sometimes inspiring, but the one that appeals to the writer most is from Cicero's *De Legibus*—"Salus populi suprema lex." The welfare (*salus*), construed broadly, is coextensive with public interests, which, beginning in the soil of earth and rising thru human society, mount upward finally to the kingdom of heaven.

DISCUSSION

DR. J. H. CANFIELD, Columbia University.—The spirit and tone of university life have changed from the cloister to the world. The day of the recluse is past. Education has come down, and is in its shirtwaist instead of in cap and gown. It is now tangible and open. More are being educated. I was glad to hear that the university should be helpful to all interests. Higher training does not lift one above his fellows, but qualifies him to be of greater use to them. "He that would be greatest among you must be the servant of all." I was glad to hear of the attitude of the state university to other schools and colleges. Some may not be ready to be taken under the wing of the university, but the day of conflict is past.

PRESIDENT WILLIAM F. KING, Cornell College, commended the paper of Dr. Jesse, and affirmed that we all, of every type of school, are working harmoniously and to a common end. Let us hope that we shall always work thus.

PRESIDENT WILLIAM L. PRATHER of the University of Texas said that the university should study the tax laws. He referred to what was done in his own state, where the

legislators thought that the professors were mere theorists. The university should be the helpful guardian of the state. This idea is a western idea which could not have been born in the East. It took long training to bring about the conditions favoring this, but the day of prejudices against the educational forces of the country is passing. The state university is the child of the people in the West, and is destined to dominate all other educational forces. He referred to the history of education in Texas in illustration of his views. The state university must respond to the interests of the state, while cultivating friendly relations with all private and denominational colleges. It should guard the people, by its economic instruction, against the wrongs of the railroads.

PRESIDENT GEORGE MCA. MILLER of Ruskin College, Trenton, Mo., said that the university seemed to stand for the interests of the people in general, but not for any interest in particular, and raised the question whether anything could be done to link the university to the real interests of the people.

PRESIDENT JESSE said he thought they were now so related, tho imperfectly. When we reach our ideals it will be time for us to be shot.

THE RISE OF NATIONAL EDUCATION IN THE SIXTEENTH CENTURY

JOHN WILLIAM PERRIN, PROFESSOR OF HISTORY, WESTERN RESERVE UNIVERSITY, CLEVELAND, O.

Both national and obligatory education, as understood in modern times, had their origin in the Reformation. When man was made responsible for the religious "faith that is within him," it became necessary for him to read and interpret the Bible for himself. Thus the education of the people, among all branches of the Protestant faith, became a religious duty to be as carefully and conscientiously performed as any other duty contained in the religious creed they had accepted. This explains the great attention that Luther and Calvin gave to the establishment of schools for the people. During the remainder of Luther's life, after his revolt from Rome, he constantly advocated universal education and urged the establishment of schools for the masses. While he believed that the church is the mother of the school, he urged the establishment of schools by municipalities. In 1524, in an address on this subject to the mayors and aldermen of Germany, he says:

Dear rulers, if we must spend so much yearly upon artillery, roads, bridges, dikes, and innumerable other things of the same kind, in order that a city may have temporal peace and tranquillity, why should we not spend as much on the poor, needy youth, that we may support an able man or two for schoolmaster?¹

He not only urged the establishment of schools by every city and village for the mental and moral training of the youth, but he urged such a course as a duty the municipality owed to itself. He believed that the safety, strength, and perpetuity of municipalities depended more on the schools they established than on their armies and fortifications. In the

¹ DR. KARL ZIMMERMANN, *Dr. Martin Luther's reformatorische Schriften*. Darmstadt, 1847. Zweiter Band, p. 517.

address from which I have just quoted he emphasizes this belief in no uncertain language :

Therefore it is becoming [he says] for the council and the magistrates to have the greatest care and diligence for the youth. For since the good, the honor, the life, and the activity of a great city are committed to their faithful hands, they do not act justly before God and the world when they do not seek the prosperity and improvement of the city with all their power, night and day. Now, a city's prosperity lies not alone in accumulating great treasures, producing strong walls, beautiful houses, and munitions of war ; indeed, where there is much of this, and reckless fools come into power, it is so much the worse, and of greater detriment to the city. But this is the best and richest increase, prosperity, and strength of the city, that it has many polished, learned, judicious, honorable, and well-bred citizens, who, when they have been able to accumulate treasures and great wealth, may keep and use them rightly.¹

And in a letter to John the Constant, who had succeeded his brother Frederick the Wise as elector, in 1525, he says :

Where there is a city which has the ability, your electoral grace has the power to compel [the people] to support schools, pulpits, and parishes. If they will not do it for their salvation, then consider that your electoral grace, as highest guardian of the youth and of all others needing supervision, shall compel them to do so, just as they are compelled to give and render services toward bridges, paths, and roads, or other matters pertaining to the public interest.²

But his plans for universal education did not end with the establishment and support of schools by municipalities. In his sermon on the "Duty of Sending Children to School" he insists that it is both the right and the duty of the state to enact laws compelling parents to send their children to school. He says :

I maintain that the civil authorities are under obligations to compel the people to send their children to school. . . . If the government can compel such citizens as are fit for military service to bear spear and rifle, to mount ramparts, and perform other martial duties in time of war, how much more has it a right to compel the people to send their children to school, because in this case we are warring with the devil, whose object it is secretly to exhaust our cities and principalities of their strong men.

Besides the establishment of schools, he urged the formation of libraries. He says :

Finally, it is well for all those who have so much love and desire that schools and studies be established and sustained in Germany, to keep in mind that we spare no trouble nor expense to furnish good libraries, especially in great cities, where such are possible. For if the gospel and all the acts are to remain, they must indeed be inclosed and bound up in books and writings.

These libraries were not to include the writings of the schoolmen and church fathers merely, but also the works of every great writer, whether pagan or Christian.

There is scarcely any phase of education that was left untouched by Luther. As one has well said :

¹ *Op. cit.*, p. 501.

² ZIMMERMANN, *Schreiben an den Kurfürsten Johannes*, 22sten November 1526. Dritter Band, p. 193.

If we survey the pedagogy of Luther in all its extent, and imagine it fully realized in practice, what a splendid picture the schools and education of the sixteenth century would present! We should have courses of study, text-books, teachers, methods, principles, that could serve as models for our age.

But Luther was too little understood by his own age, and his plans were but imperfectly realized. Still his labors brought forth much good fruit from their beginning.

In 1524 Duke John of Gotha granted a petition of the council, the parish, the dean, and the court, declaring for the Reformation. This was on Tuesday of Whitsuntide, and in August of the same year Frederick Myconius, Luther's intimate friend, was made evangelical minister and superintendent of the duchy. In this year appeared Luther's address to the mayors and aldermen of Germany. Myconius considered it one of his principal duties to care for the schools. He fused those already in Gotha into one, and established the new school thus formed in the convent of the Augustinians.¹ This was no easy task. Myconius himself says: "Schools and studies were utterly despised by the mob, and it would be much easier to find ten ready to storm and destroy a school than one or two willing to help in building one." In speaking further of the magnitude of his labors, he says:

Nobody would believe what an immense amount of labor is required to build a new house with warped and rotten wood. Oh, how long have we been compelled to work against the stream and to fetch everything from out of the fire! Now, God help us, that it may be preserved to our posterity.²

When he had completed the organization of the town schools, he placed a rector, M. Monerus, at their head. Then he turned his attention to the establishment of elementary schools. This, too, was due to Luther's influence. In 1527 Luther had written a letter to the ministers, asking "that they should read the catechism to the children and servants every Sunday afternoon at church, and hear them recite." It was comparatively easy for the ministers of the towns to satisfy these demands. But in the country, where they had in charge numerous chapels scattered over a wide territory, they were able to give but little attention to the young. To overcome this difficulty and to comply with Luther's wishes, a substitute for the minister was found in his clerk or sacristan. In this appointment of the minister's clerk to take charge of the education of the youth we have the beginning of the common schools in Gotha.

In Thuringia, also, Luther's labors brought speedy and desired results. Here the propagandist of universal education was Philip Melancthon, as in Gotha it had been Myconius. Like Myconius, Melancthon was an intimate friend of the great reformer. He was a man of great learning and

¹Dr. Henry Barnard, in speaking of this school, calls Myconius "the founder of the gymnasium." See HENRY BARNARD, LL.D., *Systems, Institutions, and Statistics of Public Instruction in Different Countries*. New York, 1872. Part I, "Europe—German States," p. 575.

²*Ibid.*

³*Ibid.* Quoted there from MYCONIUS, *History of the Reformation*, p. 54.

of much mental acuteness. In 1527, thru the influence of Luther, John the Constant appointed him to visit and examine the schools of Thuringia. He traversed the whole of this territory with Myconius and Justin Jonas. The results of his investigations were embodied in his *Book of Visitation*, which was published in the following year by the order of the elector. These labors of Melancthon had much significance in the further development of the educational ideas of the Reformation. Out of them grew the "Saxony school plan," which afterward became the educational system of most of the Protestant states of Germany. It demanded of the pastors that they should admonish the people of their charge on the necessity of sending their children to school, that they might be trained "to teach sound doctrine in the church and to serve the state in a wise and able manner."

There can be no doubt that this plan of Melancthon was based on one prepared by Luther four years earlier. In 1524 Luther wrote to Spalatin, saying:

I send you my sketch of the school as it should be, that you may lay it before the elector; and tho I do not expect that much heed will be given to it, yet I must venture, and leave the issue with God.

Melancthon himself says in a letter to Camerarius on the subject of his *Book of Visitation*: "You will see that I have written nothing more than what Luther has prompted."

The influence of Melancthon's labors did not end with the organization of schools under the Saxony plan. The *Book of Visitation* was the means of the establishment of an "Evangelical church system," in which matters of ecclesiastical doctrine and government asserted its own authority independently of the papacy.

One of the most important laws of this century was that given by Duke Christopher of Württemberg in 1599. In that year he gave the first permanent regulations for the education of the common people. Universal education was not only provided for, but insisted upon. Pastors were required to admonish the parents of their congregations twice each year upon the duty and the necessity of sending their children to school. Besides this, the schoolmasters were required to keep a register of all the boys in the district according to the classes to which they belonged. At the close of each recitation they were required to call this roll, and if the absentees were not able to give satisfactory excuses, "they were fined according to their deserts." These provisions were looked upon with favor by other districts of Germany, and in some instances laws of a similar nature were passed. Nearly half a century before these provisions for the education of the common people were made, secondary schools were established thruout the duchy by the authority of the state. May 15, 1559, Duke Christopher issued what is called the "Grand Ecclesiastical Order." The purpose of this order, as stated in the preamble, was "to

carry youths from the elements thru successive grades to the degree of culture demanded for offices in the church and in the state." This order received the sanction of the diet in 1565, and, with some modifications, remained in force till 1803. As a result of this order, there were in Würtemberg, in 1607, forty-seven Latin schools (*lateinische Stadt-Schulen*) and eighteen cloister schools in operation.

During this period there was no neglect of the higher education by Luther. The union of church and state gave the latter an indirect control over the universities. The old ones were organized in accordance with the constitution of the church, and several new ones were founded. The first of the new institutions was at Marburg, in 1527. This was followed by the establishment of one at Königsberg in 1544, Jena in 1556, and one at Helmstädt in Brunswick in 1576.

Wherever the Reformation spread, plans for universal education accompanied it. In 1542 Calvin organized the ecclesiastical state of Geneva. Education was made universal, and, so far as Calvin was able to realize his plans, it was obligatory. In 1560 the Protestants of France took up the cause of universal education. In that year the states-general of Orleans sent to the king the following memorial:

May it please the king to levy a contribution upon church revenues for the reasonable support of teachers and men of learning in every city and village, for the instruction of the needy youth of the country; and let all parents be required, under penalty of a fine, to send their children to school, and let them be constrained to observe this law by the lords and ordinary magistrates.

Reasonable and just as were these recommendations, they did not meet with the approval of the king. Eleven years later, on the recommendation of the queen, Jeanne d'Albert, the estates of Navarre passed a law making primary instruction compulsory. Probably this was borrowed from Geneva. Queen Jeanne was a zealous Calvinist, and Calvin himself wrote to her at times concerning the affairs of her government.

What Calvin did for education in Geneva, John Knox attempted in Scotland. The *First Book of Discipline*, prepared under Knox's direction in 1560, ordained that each kirk should appoint a schoolmaster able to teach grammar and the Latin tongue. In the upland towns the minister is to take care of the children and instruct them in the first rudiments and in the catechism. It seems that the civil authorities gave Knox very little assistance in his endeavors to establish schools. It was not till 1633 that there was a legal enactment for the establishment of schools. In that year it was ordained by parliamentary legislation "that a school should be established in every parish, and that the lands be assessed for that purpose."

Early in the history of the Reformation, Protestant Holland attained a higher standard of education for the masses than had been realized elsewhere. In speaking of the institutions of Antwerp, Motley says:

The schools were excellent and cheap. It was difficult to find a child of sufficient age who could not read, write, and speak at least two languages. . . . The standard of culture in those flourishing cities was elevated, compared with that observed in many parts of Europe. The children of the wealthier classes enjoyed great facilities for education in all the great capitals. The classics, music, and the modern languages, particularly the French, were universally cultivated. Nor was intellectual cultivation confined to the higher orders. On the contrary, it was diffused to a remarkable degree among the hard-working artisans and handicraftsmen of the great cities.

The progress of the Reformation brought with it greater zeal for the education of the masses, and before the close of the sixteenth century there had been established a system of schools fostered by the state. A resolution was passed in the first synod of Dort, in 1574, urging "the servants of the church" to obtain permission from the magistrates to appoint schoolmasters in every locality. A more advanced step was taken by Friesland in 1582. There it was decreed by the estates that

the inhabitants of towns and villages should within the space of six weeks provide good and able Reformed schoolmasters, and those who neglected so to do would be compelled to accept the instructors appointed for them.

In the year following, a law was passed in Zealand insisting upon education because "it is the foundation of the commonwealth." In 1586 the synod attempted to make schools universal. Then it was ordered

that the consistories or assemblies of ministers and elders of the church should take care that schools should be everywhere provided with good schoolmasters to instruct the children of all classes of persons in reading, writing, rhetoric, and the liberal arts, as well as in the doctrines of religion and the catechism of the church.

By 1609, the year in which the Puritans took up their residence in Leyden, schools for the people had become municipal institutions, which were paid for as were other expenses of the municipalities.

In England the state did but little for the cause of universal education during this period. The magnificent results achieved by the labors of Luther, Melancthon, and other reformers of Protestant Germany are in marked contrast with those accomplished by the labors of Erasmus, Colet, and More in England. Almost nothing was accomplished during the first half of the sixteenth century. At the beginning of the reign of Henry VIII. the Oxford reformers had hoped and looked for a reawakening of the people thru schools established for them. But Henry did but little toward establishing schools. During his entire reign of thirty-six years he founded but ten grammar schools. Twenty-seven were established by Edward VI. and thirty between Mary and Elizabeth. When the Reformation was considerably advanced, Cranmer formulated a scheme for the founding of schools of every grade in connection with new cathedrals which he hoped would be established. It was a part of his plan to use the revenues from the monasteries for this purpose. But the spoils of the monasteries went into other hands, and his plans were far from realized. The Reformation and that great intellectual movement which

accompanied it, both as cause and as effect, gave thru private charity the facilities for education which the state had failed to provide. In all, 250 grammar schools were established by the state and private donations during the period of the Reformation. But these schools did not furnish the primary instruction which the people needed. They were higher schools, and corresponded to the *lateinische Stadt-Schulen* established by Duke Christopher in Würtemberg. Probably these schools accomplished the object which the leaders of the movement had in view when they established them. They undoubtedly did, if that object was the furnishing of the means of education beyond primary instruction to the middle classes. But if they also had in view provisions for the intellectual training of the poor, then in that respect they must have failed. What this class needed was primary instruction, and the Reformation was far advanced before schools giving such instruction were established, and then only by private benefice.

Such was the origin of modern compulsory education, and such the progress that universal education and the principle of compulsion had made at the end of the sixteenth century. The great movement which began with Luther's breaking the ecclesiastical shackles which Rome had placed on the Christian world had transferred from the church to the state all matters pertaining to the instruction of the youth. That principle, maintained so strenuously by Luther, that the city or state, for its own safety, must establish schools for all the people, and compel the attendance of the youth upon them if necessary, had won the battle so far as it had then been waged. The next victory for the cause of universal education and the principle of compulsion was won on the American continent by the New England Puritans.

EDUCATION FOR SOCIAL CONTROL

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The nature of social control is now the most important question in American life. So important is it, and so vast, that we forget it just as we ignore the horizon, the sky, and the sun when we go on our busy personal errands over the earth. It was the prayer of Lincoln that "government of the people, by the people, for the people, may not perish." Every other kind of government has at last perished. Every other civilization has come to naught. An amazing labyrinth of lines of social control is the peculiar characteristic of every great civilization. Every civilization either has at last broken down, as in Egypt, Chaldea, Greece, Rome, and France before the Revolution, or has atrophied, as in

India and China, for want of righteous and efficient control. It may be that no race can produce enough wise and strong men to keep it developing in freedom and happiness thru ages on ages.

No civilization can proceed without agents whose wisdom and righteousness measure its efficiency and condition its vitality. Democracy cannot escape from its servants. This difficulty of producing enough competent agents for social control has never been solved. Social righteousness means more than acceptance of the brotherhood of man. We read in a very old document that one brother did not deny another's brotherhood, but simply questioned whether he was his brother's keeper. Social righteousness is greater and more difficult than personal righteousness. Single individuals are not often responsible for the poverty, the disease, the ignorance, and the sin of other individuals; but society itself may be responsible. Its obligation may be greater than the total obligations of all its members, for its opportunity may be greater.

Schools are the agencies for the transmission of culture in as real a sense as the courts are the agencies for the transmission of that lesser inheritance, the lands and goods and rights of the earth. But in our educational system, or that concatenated order which passes for a system, we have singularly neglected the preparation of our youth for the highest duties.

First we must acquire property in our own bodies, learn our own hands and feet; then add skill in tools, in games, and in athletics. We know that every human creature is worth most to himself and to us when he completely possesses himself. Next we must acquire the facts of the senses — that is, world-knowledge; and we have nature study and science laboratories, social investigations, history, and geography. These furnish the elements of preparation for self-support. Hitherto this world-knowledge has been for most men fragmentary and often incorrect. Yet the human race has blundered forward, thinking that the world is flat, that priests own God, and kings are by grace of God; that history is a series of accidents, and that whatever is is fate.

After getting this objective knowledge, the individual turns to himself, to his own soul and mind. Therefore the wise teach others literature, philosophy, and religion, which reveal the soul of humanity. The beginning of this stage of development is self-consciousness, and its end is self-control. Beyond this few ever advance. "Know thyself" was the highest point reached by the philosophy of Socrates, who exploited that popular saying. Yet there are two higher stages to which we may attain, if we do not crystallize in character and mind at earlier stages. Beyond self-knowledge is self-direction, amid the forces and events and facts of nature and of the human life. This self-direction is possible only to men of objective social knowledge. The earlier objectivity that leads to observational science and to industry is not enough. This later

objectivity is not of the senses so much as of the will, carrying one beyond truthfulness of vision to truthfulness of action, to self-revelation and self-direction in the world. Of every hero who has stood for his mission, even of every man who has risen in the world, these words of Arnold are true :

He within
Took measure of his soul and knew its strength,
And by that silent knowledge day by day
Was calm'd, ennobled, comforted, sustained.

The philosopher Rosenkranz was unable to carry his argument farther than this, the climax of individualism. The appeals by teachers to the desire in their disciples for property, both as wealth and as income ; the exhortations to self-knowledge for one's own sake, and to self-control so as to win and to hold the respect of others ; and the incitements to acquire power, so as to make a place by one's own will for one's self in the world, are very familiar to us all, both as students and as teachers. These appeals are absolutely necessary ; they are as milk to babes and as meat to strong men. "Seize your opportunities," is the maxim of those whose philosophy must end with self-control. "Make your opportunities," is for those who are capable of self-direction. Some of the greatest names of history illustrate this exalted stage of culture ; of these Napoleon is the most striking, the startling example. Higher than self-direction and social knowledge, but possible only to those who have conquered the forces of social habit and of social thought, is the stage whereon a man represents in his mind and will the best thoughts and purposes of humanity, and, as such a representative, exercises social control. For this stage our education, our very institutions, self-governing tho we Americans may be, afford no adequate preparation. Social control is a state of the mind, completely absorbed in the affairs of society for its sake ; absorbed, tho never equally alive, in any earlier state.

Our democracy employs some who cannot see even the facts of objective experience ; others who are incapable of self-support ; and many who have no self-reliance, but who, knowing nothing securely of themselves, wait to see what others will do or say. Our citizenship is afraid of the selfishness of educated intelligence. To develop self-control, to raise men out of unthinking subordination to superiors, to achieve democracy, education — elementary, secondary, and collegiate — can do much by employing the original self-activity of children and youth, and can do nothing otherwise. Unless education does produce self-reliance, the youths are better out in the struggles and temptations of life than at school or college.

The truthful observer — clear-eyed, self-reliant — and he alone, can become the righteous servant-ruler in church and state, in business and school and society. Many such self-understanding men may be called ; but even of these only a few will be chosen for continued service. Upon

these few depends the further progress of a great and difficult civilization.

But why is it all cannot become agents of social control in a nation of free equals? We have done away with kings in the state, with priests in the church, and with patriarchs in the family. We are doing away with men as masters in business, and may some day dispense with our lords of the land. We have opened the schools to all. Why do not all ascend to the very highest stages of culture, to be their own kings and priests, employers, teachers? If the way up the Parnassus of the muses is steep, that to the Olympus of the gods is sheer. If it is difficult to master the great classics and the fine arts, it is more difficult to master the sciences of humanity and the arts of the control of men.

Sometimes the early environment is so barren that it affords no proper and adequate nourishment for the mind struggling to compass the objects of the world. Sometimes — and I doubt not that this is true in at least 40 per cent. of the children of our race — the bodily apparatus is so defective, especially in the eyesight and external muscular accommodations of the eye, that the soul cannot find the real world or truly express itself in it. Many others cannot progress in culture because they must stop by the way for the means of existence. Getting beyond self-control to intelligent self-direction, and then on to competent righteous social control, is personal pioneering; for not only are there no teachers or books, save biographies seldom full of truth, but even the philosophy of modern education can point out no path.

Consider the spectacle of eighty millions of men, women, and children between our oceans, living in all these varied stages of culture; so many in the earliest stages, so few in the last! Few are they who are capable of self-control; very few are they who are capable of self-direction; very, very few, a mere handful among so many, fitted for social direction; only a fraction of those who are actually exercising social control. Consider, too, that nature brings to birth very few creatures of genius able to rise without teaching to self-knowledge, self-control, self-direction, social direction toward the righteousness which is taught by the wisdom and goodness of a hundred centuries of the cumulative experience of unknown billions of men. Children of one Mother Earth, warmed and lighted by a single sun, joint heirs to the acquirements of countless generations of creatures, which taught our very nerve-cells the right ways to do things; disciples of the common human thought, developing for ourselves practically nothing, we have a common obligation and a common opportunity. And yet to develop our people, these eighty millions, our democracy spends for all kinds of education, private and public, of our immense national income about one-third as much as it spends for beverages to make us forget our troubles! And there are educators so unaccustomed to the ratios of large figures as to compliment

our people, to cheer the hearts of niggardly politicians, and to put stumbling-blocks in the paths of the actual workers, the money-getters, in the cause of culture, by exclaiming upon the liberality of a nation of eighty million people which, out of an income of one hundred billions a year, spends three hundred millions on all forms of instruction — less than one-half of what it spends on tobacco! of which paltry three hundred millions by far the largest amount is spent upon the very rudimentary education of reading, writing, and arithmetic. As long as tobacco costs scholarly men about as much as do their books; as long as beer for the men costs all our people as much as meat for men, women, and children together; as long as all our universities cost less than our warships; as long as we are willing to spend on conquests more than we are willing to spend to irrigate our arid West; as long as city slums endure; as long as men, women, and children who work must work anywhere in inhuman conditions; as long as the doors of opportunity are shut to many; so long we can regard neither our nation as a nation of well-educated humanity nor our schools as truthful exponents of human culture. We are better than any other people; but we are only at the beginnings of wisdom and righteousness and wealth.

In the last generation of men and women we heard much about preparation for social service. "He that would be great among you, let him be the servant of all and the minister of all." The converse is equally true. He that serves all rules all. The lesson of a longer experience is the need of preparation for social control. The old required course is a thing of the past. No mere change of studies, however, can effect an essential change in the fitness of the bachelor of arts, for either social service or social control. At best he may issue into the world intending to reform it; at worst he issues into it intending to master it; sometimes he hopes to find opportunities for acquiring more knowledge or greater skill; generally his intention is to enjoy, not the world, but himself in the world. We need none of these men. We do not need men bent only on accumulating knowledge of specialties. We do not want masters. We do not accept reformers — the history of the world is the miracle of constructive omniscience. We do not care for æsthetic dilettanti good only as critics. We object to eager executives seeking to convert the treasures of the world's labor-power into plunder for themselves. We need and we use self-reliant men, who see the facts of nature; who are interested in the welfare of humanity; who are ready both to serve and to rule; who are keen for action after thought.

To prepare such men the elective system leads in the right direction; it does not reach the goal unless individualization is the one thing desirable in education, and self-reliance is the final stage of culture. The elective system has introduced the right studies. Let these now take the place of required constants.

Time was that the college graduate came from the college at sixteen or seventeen years of age. The youth scarcely goes to it nowadays until he is eighteen or nineteen. Great as has been the change in the curricula in the past half-century, it has not been as great as is demanded by the entirely different characters of the boy of fifteen and the young man of twenty. Not the college only must change its subjects, but the secondary school as well. The elective system is beginning to disclose that great mistakes have been made in the location of studies in our courses. There are college studies requiring such simple processes of thought that they belong in the secondary schools, even in the grammar schools. Psychology has demonstrated that the powers and interests of the students are the sole tests as to how early in life any subject shall be introduced, and in what form it shall be introduced. And sociology, when it has taken its form and marked out the nature of its content, will demonstrate that the needs of society are the sole tests whether any subject shall be studied at all, except as a diversion or a recreation, or by investigators in the hope that something useful may be found.

The fundamental science of the modern time is biology. The man destined for social control ought to understand humanity as it really is, offspring or kindred of all the living creatures of this realm of one Father.

A knowledge of physiology is required far beyond the compass of a course of lectures or of an abridged text-book. Some of the most important questions any society of men and women has to solve arise solely from the general ignorance of fundamental human facts. The competent, if in authority, could easily dispose of them. The tenement houses in the slums, the children with neglected teeth and eyes and bodies, the widows bringing up orphans in the awful poverty of homes in which mothers worry all night after working outside of them all day, social evils and wrongs resulting from customs quite contrary to physiological facts — sorrows like these are remediable by competent and righteous men in business and politics.

Psychology has extremely important contributions. The ability to locate individuals in such and such stages of culture has countless uses. The study of human nature belongs to the rulers of men, for it not only makes them rulers, but it qualifies them to rule well. We can save society from becoming the prey of the able but evil only by producing the wise and good who may overcome them.

Sociology serves, for the youth about to be graduated, as the final interpretation of this human life as it really is. History is both the treasure-house of human facts and a method of finding the truth. Economics is the arithmetic of the collegiate course. No man is competent to rule his fellows who does not understand the nature of capital, wages, rent, interest, profit, and taxes; just as no man is competent to buy or

sell merchandise until he knows addition, subtraction, multiplication, and division. By this standard most men in office and in business, exercising social control, are incompetent. When this great nation at last seriously undertakes the higher education, and seriously enters upon its mission of developing the human spirit, every college graduate will understand political economy. Political science demonstrates why the strong rule, just as sociology demonstrates why the good ought to rule.

The man who is to exercise authority needs to know the elements of the law of his nation, his state, and his community, the rights and duties of citizens, the nature of property in lands and goods, the principles of contract, and the definitions and sanctions of crime. Especially ought he to know the nature of corporations, private, public, and quasi-public; for corporations are the greatest devices for progress—cultural, political, economic—yet sprung from human brains.

The youth broadly prepared to rule should know the literature of his race. He cannot know this too well. He must have an adequate command of thought-imagery. This is a requirement, not only of content-knowledge, but also of skill in the arts of speech and print.

No subject is to be studied for its discipline alone. In the wealth of subjects today, we ought to choose subjects for their contents as well as for their logic.

This prepared servant of society ought to know for himself—not by books merely, nor by observation merely, but in personal experience—the life-conditions, both economic and domestic, of the men and women who are working for humanity in some great industry or in agriculture or in commerce. He will find that most opinions of the great working millionaires are caricatured by reporters and casual acquaintances, who are as incompetent to understand their motives and capacities as our school children to understand their teachers. He will learn that the control of men must neither be solely for one's own ends nor academic and impractical.

Every college graduate should be trained physically, manually, organically. He ought to know something of the fine arts and music and architecture, that our social life may be more attractive, and the appearance of our buildings and homes be more beautiful.

Meantime, during these four years—the very best for training in any man's life—the youth who is being fitted for the authority, duty, and responsibility of social control should be learning self-government by practicing its principles in a self-governing student body and in self-governing student organizations. Any college that cannot maintain student government is in need of a new faculty, and its trustees sin against the light. If half-trained councils can oversee the self-government of great cities, full of ignorant people, some of them bad, a college faculty can do as well by bodies of the finest young men in the land.

They may not be what the faculty wants; and, again, the faculty may not be what the nation needs; but the young men are the best God yet intrusts to this people.

The college belongs to the democracy of culture. Its teachers ought to be broad-minded workers for social betterment. By profession every teacher exercises social control. In what spirit does he exercise it? None of us will expect that the deepest lessons interpreted from the printed pages of the masters can eventuate at once in the action or even the character of the graduate or post-graduate. But we not only can expect, we ought to know, that the young men and women sent into the world from these cities of the light will manifest, in moments of opportunity, some memory of the wisdom of the great, and some emotion of the righteousness taught by them. The righteousness of a cultured society would transform the wealth and the labor power of the world into opportunities for intelligence, health, happiness, homes, and work worth doing for all. Every teacher fails utterly of his duty both to his students and to the mighty dead who, thru pain, toil, and danger, have won progress for humanity, if he does not bring to his students the message of social duty.

The scholar in politics? Yes, and only the scholar trained to displace all others. The scholar in business? Yes, and the scholar first of all. But in politics and business such scholars need training and knowledge as much better than at present offered in the schools as modern life surpasses earlier conditions. Education ought no longer to lag so far behind the actual progress of the times. Today home and church are visibly disintegrating. The school by integration grows more and more.

The making of men for social control is today the opportunity of higher education. In this nation its youths of talent are as the water of the river of life. To state and church comes the challenge of the poet; and the question of Lowell is the question of the living Christ of history:

Have you founded your thrones and altars then
On the bodies and souls of living men,
And think ye that building shall endure
Which shelters the noble and crushes the poor?

It may be that our historic mission is but to do better than any preceding people, and then, like all others, to fail, leaving lessons to instruct a new people in the valley of the Amazon, or to revitalize an ancient people on the shores of the China Sea. And it may be that the American republic will become the center of one self-governing world-nation, bounded by the circumpolar seas and the signs of the zodiac, postponing the day of doom by the thousand years of a millennium of human righteousness.

THE MORAL FACTOR IN EDUCATION

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Over every true school might well be inscribed the sentence which we find in Genesis: "Let us make man." That great purpose, anterior to creation, lies behind all the work of the teacher. Teaching is a species of creation. The writer of Genesis little knew how much was involved in the making of man. He conceived the process as needing only a handful of dust and a day of twenty-four hours. Now we know that the making of man means millenniums: the slow climbing from dust to crystal, from crystal to plant, from plant to infusoria, from infusoria to mammal, from mammal to Moses and Dante and Shakespeare. But as each student repeats and epitomizes the history of the race, each involves a fresh creative process, and all true teaching has behind it the basal purpose of the world: "Let us make man."

To make a muscular marvel—a Samson or a Sandow—is not to make man. To make a prodigious memory by conning Chinese classics for generations is not to make man. To produce a logical mechanism, a mere reasoning faculty, by sacrificing to it all the rest of human nature, is not to produce a man. To produce, as the output of an educational system, shrewd manipulators, abnormal geniuses, like Machiavelli in political life or Barney Barnato in commercial life, is not the object of our work. We cannot allow any part of the pupil's nature to atrophy in order to produce a dazzling prodigy. We aim to make full-orbed men—men of keen senses, trained intellect, warm hearts; men rich in imagination and emotion; men of power to resolve, to initiate, to administer, to achieve; power to see swiftly, judge accurately, decide immediately, to love deeply and hate persistently, and grow forever—men such as all the past of human history now should culminate in producing.

But the fact is that for the past few centuries we have tried in our schools to produce minds rather than men. We have given our whole strength to mentality, often ignoring the physical basis on the one side, and the entire gamut of desire and volition on the other. Modern psychology makes the will central in human nature. To possess a will active, and active on the side of righteousness, is more than to carry in one's head all tongues, ancient and modern, or to be familiar with all the sciences of the world. Just as the old political economy dealt with an imaginary "economic man," who had only slight resemblance to the true, so our schools have often dealt with a supposed learning and remembering man, only a fragment of the true man. We have thought of the educated man as one who knows certain things, regardless of how he feels or what he does. But no mere knowledge ever yet guaranteed an education. The educated man is, above all, one who controls his own powers, and controls them for righteous ends. Encyclopædic knowledge with a

weak will George Eliot has pictured in Doctor Causabon. Vast knowledge with an evil will Goethe has pictured in Mephistopheles. One of them is less than human, the other is more. It is a severe indictment of our modern training that we can conceive of an educated bad man, while to the Greeks such a being was inconceivable. As Mr. Bosanquet has said:

When we compare the ancient Greek education with our own, whether primary or secondary, as a training of the whole man, we are surprised to find ourselves put on our defense. . . . We think of education, on the whole, as an intellectual process, as a process of learning a number of things, each of which on separate grounds is necessary to be known. The Greek thought of it on the whole as a moral process; or, rather, he would not have understood you if you had asked him which of the two he thought it to be.

We, alas! understand perfectly the divorce between intellect and character, between mind and conscience, between learning and doing; but the Greeks could not conceive such a separation as possible. Plato and Aristotle shall rise up in the judgment with the men of this generation and shall condemn it; for they aimed everywhere at the production of moral human beings, and we have aimed at making learning and remembering machines. But our ideal is changing—thank heaven! The idea of self-activity has in many quarters displaced the immorality of passive reception. The idea of action as the method of learning has been embodied in our manual training. We begin to perceive that the end of education is volition—as Kant said: “The only good thing in the universe is a good will.” But how shall we embody these new perceptions of truth in our present school and college life? How shall we moralize education?

1. The first requisite is character in the teacher. When Emerson's daughter wrote to him about her choice of studies, he answered: “It matters not so much what you study as with whom you study.” A small man cannot cast a great shadow. A teacher cannot do work at a higher level than that of his own interior life. No formal instruction in moral duties can ever have one-thousandth part of the influence which steadily flows from a teacher by nature magnanimous and steadfast.

Especially is character in the teacher indispensable in dealing with very young pupils, for they depend almost wholly on example and contagion. To force little children into moral philosophy, into analysis of their own mental states or their deeds, is to produce insufferable prigs. Emphatically true is it of children: “Theirs not to reason why.” Introspection, self-scrutiny in childhood, is abnormal and dangerous. Abstract virtue they should never consider. Goodness they should know, not as a quality, but as an incarnation. Hence a teacher of rich, large, generous spirit, noble by instinct and righteous by training, is the best possible code of law and the only true treatise on moral philosophy for little children.

"O'er wayward childhood wouldst thou hold firm rule
And sun thee in the light of happy faces?
Love, Hope, and Patience, these must be thy graces,
And in thine own heart let them first keep school."

In dealing with older pupils, the need of character in the teacher is hardly less. The graduates of our secondary schools and colleges, when they come to talk over the old days spent in study, always speak first, not of the buildings in which they studied, not of the formal lessons, but of the character of their instructors. That is obviously the thing which makes the deepest impression on the student mind. A college alumnus forgets everything else sooner than he forgets the personality of his instructors. And as we all look back in life, we see that the best our teachers did for us was to incarnate before our eyes the simple, homely virtues which are the warp and woof of noble living. Marcus Aurelius opens his *Meditations* — one of the best books in the world for a modern student — with striking tributes of this kind :

From my grandfather Verus I learned good morals and the government of my temper.

From the reputation and remembrance of my father, modesty and a manly character.

From Apollonius I learned freedom of will and undeviating steadiness of purpose — and how to receive from friends what are esteemed favors, without either being humbled by them or letting them pass unnoticed.

From Alexander, the grammarian, I learned to refrain from fault-finding.

From Maximus I learned self-government and not to be led aside by anything, and to do what was set before me without complaining.

As our colleges increase in size, one of the greatest problems is how to preserve this priceless touch of soul on soul. A university whose faculty are all specialists of high repute, absorbed wholly in advancing human knowledge, may do much to widen the domain of science, but may do little or nothing in the making of men. And if it is not prepared to aim at the molding of character, it ought frankly to abandon undergraduate instruction. Here is a consideration demanding attention from every father who has son or daughter to educate. But in our secondary schools the power of personality still has full play. The head of an excellent secondary school need envy no college president. Such a head-master is one of a great fraternity of noble spirits; he is the heir of Arnold and Thring and Quick; he is a true leader in the progress of the world.

2. But the moral power of a teacher is exerted largely thru the administration of a school. The whole arrangement of a building, the conduct of school affairs, the method by which pupils enter and leave a room, their attitude in study and in recitation — the entire management of a school constitutes an atmosphere in which the pupil's life is to unfold. One of the graduates of Brown University was employed during his entire course to ring the bell for recitation about seven or eight times a day. He now declares that the best thing he received from his college course

opponent and of faith in a defeated friend is the very instinct of chivalry, and without it life will become, like nature, "red in tooth and claw."

4. Some teachers who readily admit the moral effect of administration and of student sport have never yet fully recognized the power of moral methods in the class-room. They have never realized the value of what Mr. Lecky calls "the intellectual virtues." In the study of language, training in translating is training in truth-telling, in just discrimination, in fair comparison, in adequate representation. One's choice of words in writing is an index of the character, and the style is the man. It was said of Gibbon, perhaps unjustly, that he wrote in a style in which it was impossible to tell the truth. Anyone who compares Macaulay's glittering sentences with his style in correspondence or conversation will see how far he was willing to sacrifice truth to epigram. The influence of the scientific spirit on literary, and especially on oratorical, style has been profound. The orations of Webster are too ponderous for our day, and the delight of Everett in mere rhetorical splendor is wearisome to a generation which is eager for the fact and distrustful of verbal drapery. College writing ought to feel the changed temper of our time and cultivate the virtues of simplicity, directness, and truth. The study of science itself has done much to promote exactness of observation and honesty in report. It has taught us to trace events to causes and reserve our conclusions to the end of our investigation. It has set before us, as the model student of the nineteenth century, Charles Darwin, of whom it has been said that in all his voluminous writings not an instance can be found of a fact misstated or consciously perverted. It has given our students patience in study and taught them the greatness of the creation. It has silently molded the character of millions. Manual training has given to many pupils certain virtues that books cannot impart, and history when really taught will be, as Froude says, "the voice of God forever sounding across the centuries the laws of right and wrong."

5. Thus far we have said nothing about direct ethical instruction. This is last in order of time, and last in order of importance. But it cannot be ignored. After a student has learned to admire the right and to do the right and to love the right, comes the formulation of right principles and rules, and the question why one thing is right and another is wrong. As flowers come before botany and stars before astronomy, moral living comes before moral philosophy. Yet inevitably the student will come to ask as to the reason of righteousness, and will need direct ethical teaching. Here our procedure must depend largely on circumstances. In institutions wholly under private control we may add certain religious instruction as a powerful sanction to the moral life. In public schools and state universities this is impossible. But it does not follow that the teaching and study of practical ethics is impossible. The

theory of ethics is still in debate among philosophers, but the *praxis*, the actual life according to practical reason, is something which may be taught by Christian, Jew, or agnostic, and may be taught in the same way by all of them. There can be no valid objection to the use of brief treatises on moral conduct which shall formulate principles and enforce them by the actual consequences of conduct as seen in society and history. That righteousness tendeth to life, and that the wages of sin is death, is not, and never can be, sectarian instruction. It is simply a statement of moral gravitation, as universal, as pitiless, and quite as important for us to appreciate as the law of physical gravitation. A text-book on this subject must describe the virtues which are essential to human beings dwelling together, must show them in the great characters of history, and reinforce them by their results in the social organism.

In two respects, especially, do we need such instruction today. First, we need training for citizenship. The average student knows little about the government under which he lives, and feels small responsibility for its character. He does not look forward, as did the pagan youth, to the service of the state as the noblest possible career, but he thinks of laws and courts and legislatures as instruments thru which, by proper manipulation, a skillful citizen may attain his private ends. Such an attitude is anti-social and anarchistic. The worst anarchists are not those who wave a red flag. They are those who use the American flag as a cloak for the concealment of private schemes and the attainment of selfish ambitions. The essence of anarchy is the exaltation of self above the state. This spirit must be conquered, not in Haymarket square, but in the school and the college; not by the policeman's club, but by the teacher's personality. "To replace is to conquer;" and this anti-social attitude must be replaced by a large-minded patriotism which counts the highest honor for a citizen the service of the state.

In another direction is this training still more important—in preparation for the duties of home life. Back of state and church and school stands the home, the fundamental institution of civilization. When the home is strong and pure, all other institutions will flourish; when the home decays, all is corrupt. Yet probably all of us who have been thru the public schools have heard not one word of direct instruction on the duties of parenthood or even of simple home life. The great facts of the transmission of life, the sacred mystery of the relation of parent and child—these are things which Puritan prudens have banished from the teaching in either school or home; and in the one domain where the student most needs reverent instruction from noble minds, he is left to seek it from the least reverent, if not the most degraded, of his companions. An education which is silent here is wretchedly incomplete. Like the ostrich, it hides its head in the sand and hopes all will be well. I rejoice in an increasing literature treating of these themes; and in every true

school a reverent teacher may find a way to lead from the bird's nest to the human home, and show how all creation culminates in the love which makes the fireside and the cradle. In our secondary schools and colleges, the obligations and opportunities of home life may be clearly set forth. When they are thus seriously studied, our young people will not blunder into marriage so often as now, and the divorce courts, that have been already driven west of the Mississippi, will be driven by a rising public sentiment into the Pacific ocean. Our teachers will then think more of students than of studies, more of making men than of school programs or apparatus.

DEPARTMENT OF NORMAL SCHOOLS

SECRETARY'S MINUTES

FIRST SESSION.—WEDNESDAY, JULY 10, 1901

The Normal Department met in the chapel of the First Congregational Church at 3 P. M., President Charles D. McIver in the chair.

James E. Russell, dean of Teachers College, Columbia University, New York, read a paper on "The Training of Teachers for Secondary Schools."

The discussion was introduced by Professor George H. Locke, of the University of Chicago, and was continued by Principal F. B. Palmer, State Normal School, Fredonia, N. Y.; President Z. X. Snyder, State Normal School, Greeley, Colo.; Dr. C. C. Rounds, New York city; Principal H. B. Frissell, Hampton Institute, Virginia; Professor Walter Ballou Jacobs, Brown University, Providence, R. I.; Principal F. J. Cheney, State Normal School, Cortland, N. Y.; President Charles McKenny, State Normal School, Milwaukee, Wis.; President John R. Kirk, State Normal School, Kirksville, Mo.; and Principal A. S. Downing, Training School for Teachers, New York city.

The following Committee on Nominations was appointed :

John W. Cook, De Kalb, Ill.

A. S. Downing, New York city.

SECOND SESSION.—FRIDAY, JULY 12

The department was called to order at 3 P. M. by President McIver.

The Committee on Nominations reported as follows :

For President — J. F. Millspaugh, State Normal School, Winona, Minn.

For Vice-President — Myron T. Scudder, State Normal School, New Paltz, N. Y.

For Secretary — John R. Kirk, State Normal School, Kirksville, Mo.

The above-named officers were duly elected.

A resolution was adopted that the meetings of this section next year should be held on Wednesday and Thursday afternoons, and not on Wednesday and Friday afternoons.

The speakers on the program being absent, the meeting was resolved into a round-table discussion on the practice school, led by President John W. Cook, and participated in by Messrs. Millspaugh, Lyte, McFarland, McIver, Scudder, and others.

After the discussion, Miss Laura E. Aldrich, Walnut Hills High School, Cincinnati, O., spoke briefly, saying that she was one of a committee of four representing the National Academy of Elocution, whose aim it is to gain recognition in the normal schools of this country of the necessity of teaching enunciation, articulation, and pure tone.

Miss Aldrich's remarks were favorably received, tho, owing to the lateness of the hour, no resolution or recommendation touching the matter was introduced.

Adjourned.

MYRON T. SCUDDER, *Secretary*.

PAPERS AND DISCUSSIONS

THE TRAINING OF TEACHERS FOR SECONDARY SCHOOLS

JAMES E. RUSSELL, DEAN OF TEACHERS COLLEGE, COLUMBIA
UNIVERSITY, NEW YORK

Two years ago, at the meeting of the Department of Superintendence held in Columbus, O., I read a paper on this topic. In that paper I attempted to sketch the situation as I saw it, and to emphasize what seems to me still the essential qualifications in the professional training of teachers for secondary schools. These qualifications were summarized under four heads, viz.:

1. General knowledge.
2. Professional knowledge.
3. Special knowledge.
4. Skill in teaching.

First, general knowledge. The liberal culture implied in four years of training in advance of the grades to be taught is surely not too much to require from every applicant for secondary teaching. The fact that the secondary teacher is to some degree a specialist, that he knows his subject and exercises considerable ingenuity in satisfying the requirements of college entrance or some examining board, is no indication that he has a world-view of sufficient breadth to justify him in attempting the training of youth or an understanding of related studies sufficient to enable him to teach his own subject in a scientific manner. The inspiring influence that comes from well-developed manhood or womanhood taught to view the subject-matter of secondary education in a comparative manner, trained to see the relationships everywhere existing in the various spheres of knowledge—yes, the unity pervading all knowledge—is an influence that the secondary school can ill afford to neglect.

Second, professional knowledge. It is equally important that the secondary teacher be able to view his own subject and the entire course of instruction in its relations to the child and to society, of which the child is a part. A teacher may be able to teach his subject never so well, may even have the reputation of being a distinguished educator, yet his life long be a teacher of Latin, or physics, or history, rather than a teacher of children. The true educator must know the nature of mind; he must understand the process of learning, the formation of ideals, the development of will, and the growth of character. The secondary teacher needs particularly to know the psychology of the adolescent period—that stormy period in which the individual first becomes self-conscious and struggles to express his own personality. But more than man as an individual the teacher needs to know the nature of man as a social being. No knowledge, I believe, is of more worth to the secondary teacher than the knowledge of what standards of culture have prevailed in the past, or now exist, among various peoples, their ideals of life, and their methods of training the young to assume the duties of life. Such study of the history of education is more than a study of scholastic institutions, of didactic precepts, or the theories of educationists; it is *Kulturgeschichte* with special reference to educational needs and educational problems. It gives that unifying view of our professional work without which it is idle to talk of a science or a system of education; it prepares the way

for the only philosophy of education which is worth teaching. Under professional knowledge I should also include such information as can be gained from a study of school economy, school hygiene, and the organization, supervision, and management of schools and school systems at home and abroad. Some of this technical knowledge is indispensable for all teachers; all that can be gained is not too much for those who will become leaders in the field. But the least professional knowledge that should be deemed acceptable is an appreciation of the physical conditions essential to success in school work and a thoro understanding of psychology and its applications in teaching, of the history of education from the cultural standpoint, and of the philosophic principles that determine all education.

Third, special knowledge. The strongest argument that can be urged against the average college graduate is that he has nothing to teach. The argument applies with even greater force to the normal-school graduate, however well he may be equipped on the professional side. Neither liberal culture nor technical skill can at all replace that solid substratum of genuine scholarship on which all true secondary education rests. A teacher with nothing to teach is an anomaly that needs no explanation. And I count that knowledge next to nothing which must be bolstered up by midnight study to hide its defects from a high-school class. No one who knows the scope, purpose, and methods of collegiate instruction, no one familiar with the work of the normal school, will posit for a moment that such training necessarily gives any remarkable degree of special knowledge. I say this without any disrespect either to the college or the normal school; it is not the first and foremost duty of either of these institutions to turn out critical scholars or specialists in some small field. But special scholarship, I maintain, is an absolute necessity in the qualifications for secondary teaching. Without it the teacher becomes a slave to manuals and text-books; his work degenerates into formal routine with no life, no spirit, no educative power, because he knows no better way; the victims of his ignorance rise up to call him anything but blessed, and take their revenge as citizens in ignoring altogether professional knowledge in the conduct of public-school affairs — because they, too, know no better way. Now as never before, I believe, do we need to emphasize the possession of special scholarship as an essential prerequisite to secondary teaching.

Fourth, technical skill. It is safe to say that no quality is more earnestly desired in the teacher, or more persistently sought for, than the technical ability to teach. The first question asked of an applicant is not, "Has he had a liberal education?" or, "What is his professional knowledge?" or, "Has he anything to teach?" but this: "Can he teach?" The popular mind fails to recognize the interdependence of these qualities, and failing in this it bases judgment of a teacher's ability on the relatively nonessential. Ability to maintain order in the class-room, to get work out of his pupils, to satisfy casual supervisors and examiners, to keep fine records, and to mystify parents — this too frequently passes for ability to teach. How seldom, indeed, is a teacher tested by his ability to get something into his pupils, by his ability to impart his knowledge in a way that shall broaden their horizons, extend their interests, strengthen their characters, and rouse within them the desire to lead a pure, noble, unselfish life! School-keeping is not necessarily school-teaching. The technical ability to teach includes both. The art of teaching is mimicry — a dangerous gift, unless it is founded on the science of teaching which takes account of the end and means of education and the nature of the material to be taught. School-keeping may be practically the same for all classes of pupils, but true teaching must always vary with surrounding conditions and the ends to be attained. Graduates of colleges and normal schools alike must fail in technical skill if they teach as they have been taught. The work of the secondary school is unique. It requires an arrangement and presentation of the subject-matter of instruction in a way unknown in elementary education and unheeded in most college teaching; it requires tact, judgment, and disciplinary powers peculiar to the management of youth. Herein is the need of

that technical skill which is not, as has been well said, "a part of the natural equipment of every educated person."

The question before this department is: How can these qualifications best be secured? There may be, however, a preliminary question which some will desire to have answered: What is the relative importance of these qualifications, if all cannot be secured? In attempting an answer, I am well aware of the difficulties presented by actual conditions in various parts of the country, even by conditions which occasionally arise in almost any school, and more particularly by situations presented in the individual characteristics of teachers. There are schools in all parts of the country (one might almost say, all schools in some parts of the country) which think that they cannot afford good teachers. To such schools I can only say that they are too poor to be able to afford poor teachers. It is our business here to assert that the best teacher is always the cheapest; and if our influence has any weight, it should be used energetically wherever it is proposed to employ a poor teacher merely because the poor teacher will work on a lower salary.

The personality of the teacher, however, is another matter. There are persons who might conceivably possess all of the qualifications which I have called essential, and yet be unfit to train animals, to say nothing of teaching children. In fact, these qualifications which I have enumerated are really conditioned by certain universal human attributes which are prerequisite to the truest success in any vocation in life. The person who does not first of all have high moral worth, intellectual honesty, fertility of imagination, industry, sympathy, tact, and common-sense can never become a good teacher, and a notable deficiency in any of these attributes will assuredly prevent a person from becoming a great teacher, regardless of professional training—the best that can be given. No one knows better than we do how absolutely essential is the right personality in the teacher. This knowledge, however, should not make us unappreciative of professional training. The rather should we see in professional training the means whereby native impulses are made available and directed systematically toward the highest ends of education. It can do no harm for us to exalt the native qualities in a teacher's equipment, but it can do no good to overestimate them. School officers too often exhibit a lack of intellectual honesty or common-sense when they make professional qualifications of secondary importance in the selection of teachers. From that position it is only one step to personal and partisan favoritism; for no school principal or superintendent can make a strong case against political interference in school affairs, if he himself does not consider professional training an essential article in his educational creed. I yield to none in my appreciation of what is called "personality" in the teacher, but I maintain that the "personal" and the "professional" are co-ordinate, and that both are essential. To make the "personal"

subordinate to the "professional" may be a sin ; but to subordinate the "professional" to the "personal" is a crime.

What, then, of the four qualifications which I have enumerated as essential in the professional training of a secondary teacher ? Is any one of greater relative importance than any other one ? First, it may be said that a college course nowadays gives no assurance of general knowledge. There is considerable justice, I fear, in that claim. Our colleges are all pretty thoroly inoculated with the germs of the elective system, and some of them have already developed into serious cases. In fact, it has become so epidemic that it seems useless longer to maintain a quarantine against the contagion. However, this movement may not be a plague except to those who do not know how to take advantage of it. It is true that never before has such wealth of opportunity been presented in higher education. The list of courses offered in our largest universities is certainly bewildering to one who is in doubt either of his own abilities or of his future needs. So long as I do not know myself, or what I shall become, how can I choose intelligently from the tender made by a modern university ?

And, from another standpoint, it may be asked : How can a college faculty intelligently prescribe a curriculum for an unknown person bound for an end that is also unknown ? It is the complexity of modern life that affords the fullest justification of the elective system in higher education. But there is no justification for free election when a definite profession is in view, nor should there be any serious doubt of what subjects are of most worth in the training of a lawyer, a physician, or a teacher. And, in the case of the teacher, most subjects of the college course enter into his professional equipment. They are in part the means and instruments which he must later employ in professional service. Hence I do not hesitate to say that the collegiate education of the secondary teacher should be general in character and liberal in its nature and influence. Moreover, it is not the duty of the college or university to make courses of study suited to the needs of teaching or of any particular profession ; it is our business as teachers to know what is best for those who will come after us, and it is our duty as a profession to insist upon public recognition of our claims. In other words, it is absurd for us to criticise the college for not giving us what we want and in the way we want it ; our part is to know what we want and to see to it that we get it.

There is an assumption in what I have said that a college course is an integral part of the professional training of a secondary teacher. After due allowance has been made for all the defects of collegiate education, it must still be acknowledged that there is no other institution which can more satisfactorily give the general knowledge so essential in a teacher's equipment. In my opinion, it is scarcely worth while to discuss this

point. Nevertheless, the practice of some normal schools warrants the belief that a different conclusion is possible. I fail to see on what grounds such practice can be defended. A normal school that sets itself up to train teachers for secondary schools either greatly magnifies its office or deliberately stultifies the profession which it represents. Of course, I do not refer to those institutions which maintain academic courses equal in scope and quality to college courses, and which provide for four years of instruction in advance of the secondary school. A college degree is no criterion of excellence, nor is it necessary that the institution be known as a college. What is wanted is an education broad enough and liberal enough to qualify the teacher to select and train leaders for the coming generation. Such an education surely cannot be given by an institution that limits its field to the needs of a single profession, whether that profession be dentistry, medicine, engineering, or elementary teaching. Not all of a college education comes from the class-room; an important part of it comes from the associations of persons with widely differing interests and ambitions. A professional school is narrowing in its influence. A normal school, therefore, if true to its own high calling, cannot be expected to afford a liberal education or to meet the requirements in general knowledge which the secondary teacher should have.

In the second place, no ordinary normal school can sufficiently equip the secondary teacher in special scholarship. And the secondary teacher who is not a specialist is an elementary teacher who has mistaken his calling. I am well aware that there are schools which expect teachers to teach anything and everything, but unless such schools can secure teachers who are masters of anything and everything, it is a misnomer to call them secondary schools. The age of pupils is no guide to the grade of a school. If it were, we should have "evening universities" in New York city where adults learn their A B C's. It will be a glorious day in American education when we have teachers thoroly capable of teaching any subject in the secondary-school curriculum, but until we can be certain that such universal specialization is an assured fact, we would serve our profession better to insist on sound scholarship in one or two subjects. As things are now in most states, it is a disgrace to the teaching profession that we teachers make no efforts to distinguish between the competent and incompetent. We even look complacently upon the efforts of politicians and lawmakers to fix the metes and bounds of our own profession. While it may not be proper for us to adopt trades-union methods, it is certainly most becoming in us to uphold the dignity of our profession by advocating at all times those standards which we know to be right—right not only for us as teachers, but right also for those whom we instruct. And I know I am right when I say that the secondary teacher should be master of every subject which he is called

upon to teach. Moreover, I am convinced that the patrons of our secondary schools will believe us when we say it honestly; and when they are convinced, the means for securing such teachers will promptly be provided.

Finally, we have to consider the aim of the whole matter in what I have called the technical qualifications of the teacher. The public is coming to recognize, what some of us have long known, that trained teachers are superior to novices. That graduates of normal schools are in demand for secondary-school positions does credit to public opinion; that they should be encouraged to accept such positions without having made adequate collegiate preparation is not creditable to the normal schools. The fact is that collegiate and normal training are both essential. The problem is how to secure both.

I can see only two ways that are practicable. One way is to provide in the normal schools a distinct course to train college graduates for secondary schools; the alternative is to establish, in connection with universities, professional schools for teachers. Either plan is difficult of execution. College graduates do not assimilate readily with normal-school students; and even if special courses were provided, it would require a change in policy and an elevation in standards which few normal schools could or should be expected to meet. On the other hand, it ought to be perfectly clear that a chair of pedagogy—even when it is called “education” or “the science and art of teaching”—is no adequate substitute for a professional school for teachers. Sixty years ago there were such professorships in law, but today we have law schools. How long must we wait for “schools of education”? The universities must provide not only courses in the history and philosophy of education, psychology, and its applications in teaching, school economy, and the like, but they must also provide for extensive and thoroughgoing practical work. A professional school for teachers is no more complete or adequate without schools of observation and practice than is a medical school complete and adequate without a hospital and clinical laboratory.

So far as secondary-school work is concerned, therefore, either the normal school must raise its standards and prepare to enter a new field, or the universities must deal with teachers as honestly and liberally as they do with lawyers and physicians. Personally, I think the universities are the better fitted to take over this work, and it seems to me that they are making very satisfactory progress. But there is chance for great improvement, and this body should let it be known that it appreciates the gifts received, but never ceases praying for still greater blessings.

DISCUSSION

GEORGE HERBERT LOCKE, assistant professor of education, University of Chicago.—The educational world does move. We are entering upon the new century with only

a few doubting Thomases in our ranks. This is a happy state, because we have many warnings in the history of education that we become so joyous over our victories that we are inclined to press them too far, and so spoil the result. The doubting Thomases keep us to the earth and to the necessity of making haste slowly.

Proof of this progress of which I have spoken was given me this year, when a mature student in my department undertook to ascertain, by private correspondence, the opinions of representative professors of our universities—in departments other than that of education and teaching—on the advisability of professional training for those who intended to enter the teaching profession. The result was extremely gratifying, and I was surprised to find how many felt that such training would greatly aid the young college graduate. True, we heard the old song of "teachers being born and not made" again and again, and it was quoted just as if it were a new discovery, and that this generative process applied only to teachers. This, to my mind, is an economic question in which is involved the old law of supply and demand. If the supply of "teachers by the grace of God," as Laurie calls them, were equal to the demand, we should be delighted to turn our energies to some other field of human endeavor; but we are facing a condition, not a theory, and as the demand far exceeds the supply, and as there seems to be no apparent way of applying any Dr. Schenck theory to aid the generative process, we are trying to do our best with the people who were apparently born to something else, but who wish to enter our profession.

We can justify our position on historical grounds—always a strong argument with the Anglo-Saxon. In the first of our great universities, that of Paris, founded in the twelfth century, the degree of bachelor of arts was given to the student who had satisfied certain scholastic requirements; i. e., it stood for a certain amount of knowledge. The holder of the bachelor's degree was allowed by his master to teach in the school, that he might gain experience in teaching, and that the worshipful company of masters of arts might decide whether he had the ability to communicate knowledge as well as to acquire it. It was only after he had shown this ability that he was admitted to the degree of master of arts, and was given the diploma conferring upon him the *jus ubicunque docendi*—the right of teaching everywhere. In those days the degree of master of arts had a significance, and it is interesting to see how early in our university life was the idea that there was an essential difference between the ability to acquire knowledge and the ability to impart it.

But the burden of proof in other respects is still upon us, and our work is by no means done. Granted that there is this difference today, what are we to offer the college graduate in the shape of professional training that will really help him in his work? This must be a dignified, solid, substantial, and reasonable course for an educated man. Such a course of training should certainly be given in a university and not in any separate institution, such as a school of pedagogy or a normal college. It should not be given entirely in one year, as is often now the case, for there is but little chance for adequate correlation and sequence of work.

The study of education falls naturally into three great divisions: (1) the history of education; (2) the theory of education, including the principles of education; (3) the organization and administration of education, including practice teaching. This also is the natural order in which these divisions ought to be studied. The history of education should come in, say, the junior year, as an elective in the college course. It ought to be treated as a culture subject, and deserves adequate treatment as such just as much as does the history of government or of any other social institution. It can be made so interesting and suggestive that it will be chosen by many who do not intend to enter the teaching profession, but who will possibly be associated with education as members of school boards, or in some other public position in which they may help toward an enlightened public opinion on educational matters.

Students who intend to teach will, of course, take psychology in the college, and

this should not be differentiated from the ordinary psychology course offered to undergraduates. It is for culture purposes, and has no direct application to teaching. But there will be offered afterward a course in educational theory, in which can be introduced whatever educational psychology is necessary; but psychology as such must be a prerequisite. This study of educational theory can be made very suggestive, especially if the student has had the history of education and psychology.

And now remains a peculiarly important professional course — the organization and administration of education. This involves the application of the theories of education, a comparative study of how these theories are being applied at home and abroad, and a constructive study of how they might be applied, given certain local circumstances. The students have been observing teaching in various schools, and this has been discussed in conferences with the instructor, and they are now prepared to put their theories to the test in actual teaching. By this practice teaching I do not mean playing at teaching with some person ever at one's elbow to suggest, warn, and sometimes even to instruct and dictate; on the contrary, the student must be assigned a class for the mental, moral, and physical advancement of which he is to be held responsible, and over which he is given authority; for there is no meaner situation in life than to be charged with responsibility and yet deprived of authority. There will, of course, be careful supervision at intervals, so that the interests of pupils and teacher may be conserved. The success of practice teaching depends largely upon the skill and care with which it is supervised.

The student should have control of a class for a period long enough to attain some definite results. I am of the opinion that he should teach for not less than two and not more than six hours a week during some three months, and that he should be allowed to choose, as far as is economically and educationally possible, the major and minor subjects in which he has the best scholastic training and in which lie his interests as a possible teacher.

Now, this is what I would call the minimum amount of professional training for the person who wishes to teach in our secondary schools. It may be almost indefinitely enlarged, and if one is so fortunate as to have a magnificently equipped teachers' college, such as that over which Mr. Russell presides, there are possibilities for greater and better work which is legitimate graduate study. I am offering this simple plan as one that can be profitably used in a comparatively small college, provided that the local school authorities, or indeed the academy authorities, will co-operate, so as to make the secondary school available for practice teaching.

There are some who oppose practice teaching, in the belief that it is not good for the students who are being practiced upon. This position is tenable when the practicing teacher has a class for only a very short time, when teachers are frequently changed and the continuity of the school work is interrupted, and when the teaching is not skillfully supervised. Where these details are attended to, the results have been wonderfully satisfactory to the headmaster of the school, to the pupils of the school, to the regular teachers, and to the parents. This is not mere hearsay evidence, but I speak that I do know; and I am persuaded that these are possibilities in even a small college, and that no college should send forth graduates into our secondary schools without at least this minimum of sound professional training.

PRINCIPAL F. B. PALMER held that college graduates could get ample training in the normal schools. His experience showed him most satisfactorily that college graduates coming to a normal school entered into the spirit of the school, enjoyed their work, and got great benefit from their study and practice.

PRESIDENT Z. X. SNYDER likewise held that secondary teachers could be prepared in the normal schools, but only in case rich four-years' courses were established. The normal schools must come to this; for, otherwise, how are our secondary schools to get trained teachers?

DR. C. C. ROUNDS said that the doctrines laid down in Dean Russell's paper were revolutionary, but revolutionary in the right direction. The normal schools should not attempt to give higher education or to prepare teachers for secondary schools. Let the colleges and universities do that. Let the normal school return to the more modest duty of preparing teachers for primary and grammar grades. Of course, teachers for secondary schools need training; they also need more subject-matter than the normal schools are equipped to give. Why should the normal schools attempt to do more than they are able, or more than they were originally intended, to do?

College professors also need pedagogic training. It is a fraud for men to attempt to do that for which they have had no preparation and training. The universities themselves must provide facilities for this training; must prepare as soon as possible to give us expert teachers for higher as well as for secondary institutions; the normal school could then keep to its own function of training teachers for the grades.

PRINCIPAL H. B. FRISSELL thought the universities would soon come to this if there were a sufficient demand for it. We ought to insist on the highest training on the part of our teachers. If we do this, we shall get it. The training profession will always lag behind until we thus insist.

PROFESSOR WALTER BALLOU JACOBS spoke, by request, concerning the pedagogic training given at Brown University. The pedagogic instruction in the university is supplemented by actual experience in teaching in the high schools and grammar schools of the city of Providence. In these practice classes the student-teachers teach under the supervision of teachers of experience. The damage to the pupils in the practice classes is practically nothing. Not one complaint has been received from parents to the effect that their children were suffering at the hands of the student-teachers. Professor Jacobs feels that the work done by the college students, when carefully supervised, is better in many instances than that done by other teachers. He believes that the place to train teachers for secondary schools is either in college or beyond the college.

PRINCIPAL F. J. CHENEY claimed that in some normal schools the academic facilities afforded were so superior that it is perfectly legitimate to recommend normal graduates for secondary work. Some normal schools have better equipment in certain subjects (e. g., physics, chemistry, and biology) than many a college or university. This superior equipment is provided in order that the normal schools may prepare teachers for secondary schools. Colleges are not training teachers. What are secondary schools going to do for trained teachers if the normal schools do not supply the demand to the best of their ability?

PRESIDENT CHARLES MCKENNY said that in his state the question has come up as to whether the college or the normal school should prepare teachers for the high schools. The sentiment has been growing that it is impossible for normal schools to furnish the kind of teachers that the better grade of high schools demand. The normal schools are therefore confronted with a serious problem: either to equip for preparing teachers for the high schools or cease to attempt it at all. What should they do? Secondary schools demand better teachers, yet the universities do not supply these. Wisconsin is making an attempt to solve this problem by forming, as it were, a joint partnership between the normal school and the university, whereby the university gives credit for the work done in the normal schools, and gives normal graduates a degree after two years of university work. Thus both ends are attained, to wit, scholarship and pedagogic training.

PRESIDENT JOHN R. KIRK deplored the tendency to regard the lower grades as needing only inferior scholarship on the part of teachers. Superior scholarship is needed here as elsewhere, and normal schools should aim to give their graduates a high grade of scholarship, with the idea of sending them, *not* into the secondary schools to teach, but

into the elementary schools. He believed that normal-school faculties should urge their graduates to go into the lower grades.

PRINCIPAL A. S. DOWNING strongly favored Dean Russell's position, and also commended very highly the remarks of Principal Kirk. He declared that the weak point in the normal schools of today is that they are employing normal graduates as teachers instead of college-bred instructors. Men and women trained in college will, when they become members of a normal-school faculty, lay stress on the great importance of the best scholarship and the best skill in teaching for the lower grades.

DEAN RUSSELL, in summing up, said he was much gratified that the consensus of opinion had been strongest on his side of the argument. He admitted that normal schools had done some good service for secondary education, but he felt strongly that normal-school principals ought not to encourage their graduates to teach in secondary schools, but should insist on their making the best possible preparation, in academic as well as professional subjects, for teaching the elementary subjects in primary and grammar schools.

DEPARTMENT OF MANUAL TRAINING

SECRETARY'S MINUTES

JOINT SESSION WITH DEPARTMENT OF ART EDUCATION.—WEDNESDAY,
JULY 10, 1901

The session was called to order in the First Congregational Church at 3 P. M., by the president of the department, Charles A. Bennett, of Peoria, Ill.

The opening number on the program was a vocal solo—"Could I But Tell," *Klein*—by Harold Jarvis, of Detroit.

A paper on "Textile Arts as Constructive Work in Elementary Schools" was read by Miss Clara I. Mitchell, of the Chicago Institute.

A paper on "Artistic Handicraft in Primary and Secondary Grades," by Miss Helen M. Maxwell, principal of the Corcoran School, Minneapolis, who was unable to be present, was read by Miss Bonnie E. Snow, president of the Department of Art Education, who added interesting explanatory statements and answered many questions. The paper was illustrated by a collection of objects made by students in the public schools of Minneapolis.

A general discussion followed by Charles H. Keyes, Hartford, Conn.; Colonel Francis W. Parker, Chicago, Ill.; and C. R. Richards, Teachers College, New York.

The president appointed the following committees:

ON NOMINATIONS

Charles H. Keyes, Hartford, Conn.

Arthur D. Dean, Springfield, Mass.

Daniel Upton, Buffalo, N. Y.

ON RESOLUTIONS

William E. Roberts, Cleveland, O.

Harris W. Moore, Hartford, Conn.

A. C. Newell, Des Moines, Ia.

At the close of this session a most enjoyable informal reception was given in the church parlors by the local committees on art education and manual training, the chairmen of which committees were, respectively, Miss Myra Jones, supervisor of drawing, and J. H. Trybom, supervisor of manual training.

SECOND SESSION.—THURSDAY, JULY 11

President Bennett called the meeting to order at 3 P. M.

Mr. W. E. Roberts, of Cleveland, chairman of Committee on Resolutions, read the following, which was adopted:

Mr. President:

Your committee offers the following resolutions:

Resolved, That we, delegates to the annual meeting of the National Educational Association, express our appreciation of the effective efforts of the officers of the Department of Manual Training and the local committees for our instruction, comfort, and pleasure in providing an exceptional program; second, a suggestive exhibit of educational work; and third, a delightful reception; and that our appreciation be made manifest by a vote of thanks.

Further, as the joint meeting of the Manual Training and Art Departments has proved so instructive and significant, be it

Resolved, That the officers of the Manual Training Department co-operate, if possible, with the officers of the Art Department, in arranging a similar meeting for the coming year.

The committee:

W. E. ROBERTS.

A. C. NEWELL.

HARRIS W. MOORE.

Charles H. Keyes, of Hartford, Conn., chairman Committee on Nominations, reported the following nominations:

For President—Charles H. Richards, Teachers College, New York city.

For Vice-President—Charles F. Warner, Mechanic Arts High School, Springfield, Mass.

For Secretary—J. H. Trybom, Detroit, Mich.

A motion was made that the secretary be instructed to cast the ballot for the nominees, which was carried.

The ballot was cast as ordered, and the nominees were declared elected as officers for the ensuing year.

Principal Charles F. Warner of the Mechanic Arts High School, Springfield, Mass., was then introduced, and read a paper on the topic, "Education for the Trades in America: What Can Technical High Schools Do for It?"

Following Mr. Warner, Mr. Virgil G. Curtis read a paper on the topic, "The Relation of Manual Training to Technical Education."

The discussion was opened by Professor Charles R. Richards, of the Teachers College, New York city, who was followed by Professor Calvin M. Woodward, of St. Louis; Dr. Belfield, of Chicago; Superintendent Charles B. Gilbert, of Rochester, N. Y.; President J. L. Snyder of the Michigan Agricultural College; and Principal G. B. Morrison, of Kansas City. The discussion was closed by Mr. Warner.

The department then adjourned *sine die*.

FOSTER H. IRONS,
Acting Secretary.

PAPERS AND DISCUSSIONS

TEXTILE ARTS AS CONSTRUCTIVE WORK IN ELEMENTARY SCHOOLS

MISS CLARA ISABEL MITCHELL, SCHOOL OF EDUCATION, UNIVERSITY OF CHICAGO, CHICAGO, ILL.

To present the subject of textile arts as constructive work I shall, with your permission, discuss constructive work generally, and its place in the curriculum, perhaps gaining by that means a clearer point of view from which to study the value of this particular activity.

As the educational problem is now shaped, the most economical policy for a body of teachers to pursue is in the free and critical discussion of the course of study. The discussion of that question by this particular company is of vital importance, because upon the grade teachers, manual-training teachers, and art teachers rests the responsibility of the initial acts in reconstructing our course of study.

The present course of study is, evidently, not adequate to the demands of the time. Our educational ideas are undergoing radical changes. Our course of study does not meet these changes. We need a course which acknowledges the claims of the new ideals and assists in their realization. The new educational ideal is changed from "school as preparation for the future" to "school as present community life." It insists that school *is* life; that it is the place where every child begins at once to realize himself according to his own innate capabilities.

By community life we mean that state of society in which every individual member orders his conduct with reference to the good of the whole; the whole being so constituted as to necessitate the highest development of its members. As this state of society is the only means powerful or complete enough to set in motion all forces of individuals, it is evident that individual progress is only possible as community life exists, and that the good of one is identical with the advancement of all.

Our schools, in fulfilling this large social aim, must give to children all-sided growth as the result of their service to the community. It must insure to them the development of all powers—physical, mental, and moral. As all education is thru self-activity, and human faculties develop thru use, the community which is to provide for all-sided growth of individuals must call into action all the forces of those individuals.

Community life is made up of work and play; it depends upon these activities for its existence. The individual is developed thru his work and play. It is, therefore, the function of the course of study so to guide the school community as to engage all its members in educative work and play. Such work and play we call social occupations, and in their organization lies the problem of the course of study.

Constructive work, manual training, industrial arts, drawing, painting, handwork of all kinds, form a large part of these social occupations of the school life. The question is as to their place and educative value. Psychology, as well as experience, proves them to be among the central interests of life, the strongest forces in the schoolroom, the most economical means to power and knowledge. Grouped together with other social occupations, they should be the center of the course of study, and about them should be ranged all the other subjects of the curriculum.

The fitness of social occupations to stand as the central force in education is proved by history. The social life of our great world is seen to consist in the interrelation and development of a few primary and fundamental activities. Cities, farms, mines, quarries, and water-ways are filled with men and women busy with the affairs of life—engaged in the work and play of the world. All this work and play is for the satisfaction of man's needs. His necessities, reduced to simplest terms, are companionship, shelter, clothing, and food. The needs of society today, complicated as they seem, arise from these few fundamental ones, and

are the elaborations of them, developed and refined by man's educated taste.

Thru self-activity, under the necessity of food, clothing, shelter, and companionship, the human race has educated itself out of savagery into civilization. In the getting and cooking of food, the making of houses, the weaving of clothing, and adjusting himself to the habits of other human beings, man has gained the knowledge of nature and society, and grown to the power of self-direction, which constitute his present state of culture. His activities, set in motion under the pressure of necessity, have developed and multiplied with use. The rude strength of the primæval hunters, fishers, farmers, and shepherds has grown, with experience, into the skill and art of our civilization.

This has been the educational process thru which the race has passed—self-activity aroused by need. The result is our present state of society, with its sum of knowledge and stored-up power—knowledge organized into sciences, mathematics, history, civil law, philosophy; power expressing itself as skill in the arts of living—agriculture, manufacturing, commerce, social government, language, literature, and the fine arts.

Our human family has educated its children thru centuries of building, cooking, weaving, family life, and lawmaking; in processes at first simple and primitive, but growing in complexity as the race advanced. As there arose necessity for bridges and machines, people became engineers; seeing the need of better and more beautiful homes, they became architects and artists; conscious of still higher needs, they devoted themselves to the study of sciences, religion, law, government. Sense of social *need* has, from the beginning, acted as the most powerful incentive to individual human effort.

The school must apply the principle of education learned from the great world. It must be a community into which the child puts himself in work and play, and from which he gains the knowledge and power which are his individual right. Like the larger world, it must demand of its members work which sets in motion all their latent energies and puts them in contact with people, materials, forces, and laws. As the race has gained its learning and skill, the child will get his—by working out the problems of life thru the incentive of human need.

Representative forms of the great type industries appear in the school under the names of constructive work, manual training, industrial arts. The processes they involve are wood-working, metal-working, cooking, gardening, weaving, needle-work, pottery, modeling, drawing and painting, bookbinding, and printing.

Heretofore these have been superadded to the already overcrowded curriculum as valued but unrelated subjects. The time has come when, if they are to fulfill their great educative function, the course of study

must recognize their social significance and establish them as fundamental factors in the life of the school. Socialized work has been the maker, builder, educator of our race. It must be such to the children of the race.

It is for the course of study to provide work and play that will place the children in the normal, vital relations with life—in free and living contact with nature on the one hand, on the other with society. To allow for this normal interaction between the child, his work, society, and nature, four conditions are essential to the planning of all constructive work in school:

1. Everything made must be made for the sake of its social value.
2. The need for the thing to be made must appear to the maker, and must be recognized by him as genuine.
3. The work and play must be so varied and universal as to make an all-sided appeal to the child's nature.
4. It must be so directed as to connect the worker with nature and with human life as sources of knowledge.

The first condition is so bound up with the second that the two must be considered together. Both are essential to community life in accordance with its definition as a state of society in which the individual orders his action with reference to the good of the whole; for the workman can direct his powers only toward such ends as he sees and understands. He puts his intelligence into his work just in so far as the work appeals to his intelligence. He who knows the purpose of his labor can focus his attention upon it, measure his forces in relation to it, and shape conditions toward its fulfillment. That the student should know the use of what he is making is essential to his education as a free, socialized human being.

Originality, freedom, taste, can grow only under power of initiative. To know a need, and to be allowed initiative as to ways and means of filling it, gives opportunity for play of the creative element, without which work will be imitative and slavish, because the worker has not put himself into it. The putting of himself, his taste, his invention, into his service makes it a genuine offering to society. It is just that which makes the school a social, community life.

Work done in the textile arts, as in all other forms of handwork, should be the making of things of use for the school or the home, for some other school or home, or for people somewhere in the world. Enough human needs are waiting to engage our energies at all times. The necessity for laws restraining child labor proves that the work of little children is of value to society. The children, then, may be set at the simplest beginnings of that great industry which ends in clothing the human race and in beautifying human homes. Let them weave baskets, make rugs, embroider aprons and curtains, and sew garments, because

people need their work. Such making will be their education into original, creative skill. Let them know the use of each thing they are making and appreciate its value, for sense of value is interest. Interest, the great motor force in human action, makes effort easy. Interest in spinning, dyeing, and designing of things for use will open new channels for the movement of activities outward—the freeing of creative energies.

The third condition necessary to the socialization of constructive work is that it be of sufficient variety and breadth to call into action all of the child's powers, and so give him all-sided development. The power of community life as an educative force lies in the fact that its needs are so many and so varied that no individual, however abnormal or undeveloped, can escape the appeal of all of its claims. Somewhere in the work demanded by the maintenance of society is the particular need which will put into action the individual energy of each member. And everywhere is that call to disinterested, unselfish action which alone develops the highest and most potent force in man's life—consideration for his fellows.

When the course of study shall make of the school a place of play-rooms, workshops, studios, gardens, kitchens, and laboratories where children are co-operating in a real, tho small, part of the world's work, every child can find that activity thru which he may begin to realize himself. Somewhere there will be the piece of work which is to set him to thinking, feeling, doing. Then the thing he does is the expression of himself. Into it he puts his thought, feeling, skill.

It is at this living point of self-expression that human growth takes place, and that education is possible. Here the teacher recognizes his opportunity. Work in the shops, studios, and laboratories, made powerful thru purpose, self-directed, moves outward and manifests itself in a rug, a chair, a piece of pottery, a thing of use. This is art. It is a gift to society expressing the thought and feeling of the maker. Art is developed, skill grows, under the demand for creative work and thru incentive to self-expression. In complete community life this demand and this incentive exist.

The course of study must provide for the use of material and employment of processes so varied as to make possible full expression of all sides of the self in art. When our school life sets children to work in designing and making happily the things used in daily life, making them beautiful that they may the better serve human needs, it will give them art education—education in art *for* all the people *by* all the people.

The final condition for constructive work is that it shall have such direction as to connect the worker with all of life, nature, and society as the sources of knowledge.

Fitness for community life demands that its individuals have knowledge to contribute to the general good. We have seen that the whole sum of human knowledge has been generalized into great bodies of facts. It is for the course of study to provide types of industries in the schools which will direct the children toward this knowledge and give them the power of comprehending its meaning and its use. Things made in the textile arts, for example, must be so closely related to the necessities of the child's life that his interest in the things themselves, extending to the materials of which they are made and the processes by which they were produced, directs him toward the facts which explain those materials and processes. Desire to fill completely the needs for which the fabrics are woven must lead him to consideration of fibers and fabrics. It should move him to study of qualities; of causes for success and failure in their culture. He must feel the community so genuinely dependent upon the excellence of his work that he willingly investigates processes; he invents; inquires into laws and forces to apply to the improvement of his art or craft. Thus he will become a self-propelled investigator in the field of science and a contributor to the sum of knowledge in applied science. The materials used in these arts are so varied in their qualities and suggestiveness that they will set the worker wandering thru all the world of nature in search for the meaning of their charm of color and design. His own experiences in dyeing fabrics should lead him into delighted appreciation of the coloration of sky, water, flower, fruit, bird, and insect. These are but a few hints at the vital connections between nature, the sciences, and the work in the textile arts. It is sufficient, however, to indicate the closeness of relationship existing between all forms of social occupations and the natural sciences. The course of study must establish these relationships in school, thru organic correlation of subject-matter.

The facts of science should come into the child's life as they came into the life of the race; that is, when needed for immediate use. Not by the page, by the book, or even by the subject, but principle by principle, as it can be applied to daily life. To illustrate, let knowledge of physics come to him as he constructs looms, runs the sewing machine by steam, or rings the door-bell by electricity. Let him learn chemistry in dyeing, in cooking, in testing building materials. As to the correctness of the pedagogical method involved in this we may be sure. If the facts of science are to have value and force to a student's mind, they must fit the problems of his individual life. They cannot be brought to him as possible helps for the future. They must be sought by him as necessary to the movement of his work and play. Knowledge gained in this way will have clearness and meaning. It will be full and vital, because life itself is greater than any school and more potent than text-books.

Under such a plan history will be to the child the story of how other

people have done work like that which he is doing. Interest in his own building, weaving, and cooking will give him interest in the building, weaving, and cooking done by peoples of all times. If, while weaving a rug, he reads the story of man's struggle for clothing from the beginning, he learns to see in that struggle a great part of the history of man. He is able to interpret that history, because in his own person, thru the work of his own hands, he has partaken of the experience of the race. Struggle with the world's work, however elementary, puts a human being into intelligent relationship with all the workers of the world, past and present, giving him insight into history and sociology, which, reinforced by observation and study, is scholarship of social value.

Contact with materials of all kinds, study of qualities, interest in work and workers, build up in the child's mind great images of the earth and its products. Tracing the course of silk from China or Italy, woods from the tropics, metals from Siberia or the Rockies, dyes from the Mediterranean or the depths of the coal bed, the child learns to picture the earth as the rich source of materials, the background of man's life, the scene of his activities. Geography becomes the science which explains to him much of man's history, his work and civilization. So the subject-matters of the sciences, history, sociology, and geography correlate with all forms of social occupation, and on such a basis should they have their place in the curriculum.

To recapitulate, the new ideal of education demands the reconstruction of the course of study. It makes social occupations the center of correlation. About these occupations it groups all sciences, mathematics, geography, history, literature, and language as helps to the child's better understanding of his work and its relation to life.

Handwork, which is a large part of these occupations, must fill four conditions: (1) Everything made in the school shall have distinct social value. (2) The child, in making any object, must appreciate the social need which that object is to fill, thus rendering willing and intelligent service. (3) The handwork must be so varied as to call into activity all the faculties of the children. (4) It must be correlated with such studies in the sciences, history, geography, and mathematics as will give the children increasing knowledge of the work they are doing, and a growing insight into its scientific and social significance.

Teachers of handwork, in conjunction with grade teachers, can do most to bring about this reconstruction by establishing the different forms of handwork as social occupations, and bringing all other subjects into relation with them.

The most radical change involved in the re-forming of the course of study will be the correlation of the sciences, mathematics, history, sociology, literature, and the languages with the school occupations. To accomplish this, expert knowledge in different branches of subject-matter

must be called into consultation. When, with its aid, the school shall be a center of productive social activities leading outward to all sources of knowledge, we shall have an education worthy of our ideal. In such a life our children will be happy co-operators in the work of the world, Its occupations will unite them in the brotherhood of community interest, take them closer to all workers and builders past and present, and direct them toward nature as the source of all knowledge and good.

When, thru the co-ordinated working of mind and body, the children of men have learned to help each other in making the earth a garden ; in building cities which shall be the beautiful dwelling-places of men ; when they have become generous and skilled in fitly clothing all of the children of the race, the world will have a great new art. One product of that art will be the beauty added to the external world of man's building ; the other will be the greater beauty wrought in the quality of human spirit—the end of all construction.

ARTISTIC HANDICRAFT IN PRIMARY AND INTER-MEDIATE GRADES

MISS HELEN M. MAXWELL, PRINCIPAL OF THE CORCORAN SCHOOL,
MINNEAPOLIS, MINN.

For many years "construction work" has been written in our course of study. All of us have believed in the necessity of hand-training and its relation to the mental development of children. Living up to their best light, our primary grades have been trying to solve this problem, and have attempted many constructive exercises that proved themselves almost useless and without the first element of beauty. Paper chairs that will not rock and paper wheels that will not turn are a rather discouraging and unsatisfactory product.

Last summer a part of the Minneapolis principals and teachers spent a week at the Chicago Institute and at the summer school at Chautauqua, refreshing their minds with study and seeking sources of knowledge wherewith to enrich their future work. At an early day attention was called to weaving and basketry, as taken up in connection with the study of primitive people, and as a phase of manual training for young children. To those of us who had known of the fruitless plans and gropings after something better in the industrial line came the thought that here was the foundation for occupations that would train both hand and brain, and would result in a product of some practical use, and even of artistic worth. It is needless to say that that line of work was pursued with a vigor and interest characteristic of our teachers, roused by the needs of our pupils and inspired by the possibilities in store.

Returning in September, the arts we had acquired were shared with fellow-teachers, who were quick to see their value, and lessons were planned and given to large classes and to individuals as opportunity offered. The spirit of industry rapidly spread, until before the close of the first term nearly every building in the city was engaged to some extent in the work, tho to a large degree in an experimental way. The question of materials was rather a formidable one at the beginning. The sympathy of our superintendent and supervisors was evinced in a very practical way by the readiness with which they joined the principals in contributing a sufficient sum to purchase enough material for a large beginning. Small hand-loomes of pasteboard were used, and many a little rug of pleasing colors and simple design was woven. These were afterward replaced by larger wooden frames, similar to slate frames, and made by older pupils. Ravelings of carpets, yarns, and Germantown wools, large and soft, were used, being supplied mostly by the children, with generous contributions from other sources. Our school board has shown its appreciation of the value of this work by voting a liberal sum for its continuance the coming year.

Class exercises in rattan weaving and a combination of rattan and raffia were given in a variety of stitches evolved from the inner consciousness of some of our more resourceful teachers. This is largely individual work. Children were taught in groups, who in turn showed their classmates. These exercises have resulted in some of the most artistic work of the year.

Raffia, which is a product of the Madagascar palm, is rich in possibilities. Hats for dolls and people, mats, boxes, and shopping bags of real service, which easily claim a commercial value, are made and can be disposed of in the Twin Cities, as well as any other well-made article. But the work has not been introduced as a source of revenue, but as a means of education. Nor are we dependent upon materials of commerce. Willows from the roadside are made to lend themselves to the making of serviceable baskets, and even the reeds and grasses have a use.

Pretty effects have been produced by coloring both raffia and rattan with diamond dyes. Few tools are required. A knife, a pair of scissors, and a worsted needle are all that is necessary. One lesson a week has been given in handicraft above the first grade. In that grade it has been used largely as "busy work" for the leisure moments that always come. As far as has been practical, the co-operation of older pupils has been enlisted, they doing those portions which require more muscle, while the smaller fingers carry the work to completion. A feeling of unity and a spirit of interest and helpfulness thruout the building have shown themselves in a very marked degree by this plan.

An effort, never lost sight of, has been made to place before the children high ideals as to excellence of results in strength, durability,

quality of workmanship, and artistic worth. To this end, class and individual discussions always form a part of every exercise of this kind. What shall we do in this emergency? You think out for yourself a plan for producing this or that effect. Always, what do you think is the best way to do this? As a result, we feel a just amount of satisfaction, for a beginning, in the exhibit found in our state building at the Pan-American Exposition in Buffalo and in that placed before you today. The revival of handicraft is in no sense local. It is entering all circles, and attracting the attention of educators all over the country as a means of hand and brain development, and as holding a relation to the other work of the school. A recognition of the need is growing every day. To meet this need we know as yet of no more satisfactory means than that which you see before you. I know of no portion of the school work in which the life and individuality of the child are embodied so much as here. It means so much to him in the quick eye, the deft hand, ability to adapt, and in the cultivation of those qualities of patience and perseverance that count so largely in character-building and that go to make up strong manhood and womanhood.

DISCUSSION

CHARLES H. KEYES, Hartford, Conn.—We are going to give up a great deal of the so-called busy work. There must be more purpose back of our manual training. We have worked too much with blocks. We are getting nearer the crafts and the trades schools. The work must become dominated more and more by art, and the work must become constructive art instead of simply manual training. Clay is the best material for use in awakening the artistic interest in the child. Clay, drawing, reed, and raffia are but different mediums to carry out the constructive art ideals. Manual training must learn more from art.

COLONEL FRANCIS W. PARKER, Chicago, Ill.—The art and manual-training work should be united, but we should not stop there. With these we must unite geography, history, and science. Clay is the greatest medium for developing the constructive art instinct, but the work must not be thrown back into the clay box when made. A kiln should be on hand in order to complete the work.

C. R. RICHARDS, Teachers College, New York city.—I wish to emphasize this union between art and manual training, but art needs as much help from the manual training as the manual training does from the art. Art will never be able to meet its true results until it is the expression of art in useful articles.

LANGDON S. THOMPSON, Jersey City, N. J.—I do not think the departments of art and manual training should unite. They should continue their work side by side.

PRESIDENT J. L. SNYDER of the Michigan Agricultural College.—We want something more than skill in education. We want culture back of it. I would give all the manual training possible, adapted to the conditions and necessities of the life in the community in which we are situated, but would do nothing that would interfere with the freest mental development, and with the freest right to choose the occupation in life that the student may wish to follow afterward. I believe it is possible to give a technical training and at the same time give a general cultural training with it. And if that can be done, well and good; but if either must be sacrificed, let it be the technical training.

THE RELATION OF MANUAL TRAINING TO TECHNICAL EDUCATION

VIRGIL G. CURTIS, SUPERINTENDENT OF TOLEDO POLYTECHNIC SCHOOL, TOLEDO, O.

If we were entirely done with urging the claims of manual training to a dignified place in the educational system; if we had carried conviction to the minds of all the doubters, and made it an established and accepted proposition that the full co-operation of hand and mind is absolutely essential to the realization of a harmonious development of the human powers, then might we address ourselves to the pleasing task of carrying out the logical continuity of the new education and pushing it forward toward the achievement of that skill in useful arts which constitutes the highest stage of civilization.

But while all progressive educators, all wise philosophers, and all far-seeing statesmen agree that hand-training is not only a fundamental element in education, but that it bears promise of being one of the most potent factors in the solution of the great economic and social problems of the day, still it must be admitted that the general public has not yet grasped the idea in its full significance. Too many of our administrators of educational affairs still look upon manual training in the school as an innovation, if not a fad, and entertain grave doubts as to the expediency of expending public money for the equipment of shops for teaching boys carpentry, and kitchens for instruction in household science and cookery.

Thus has the tremendous obstructive power of tradition stood in the way of progress in education. The speculative philosophy of the Middle Ages has so long held sway over our institutions of learning that it is extremely difficult to break away from its baleful influences. That blind reverence for the dead past, that self-satisfied content with methods of antiquity, has compelled a slavish adherence to text-books, a study of abstractions rather than things.

So the schools have gone on in the old grooves, teaching history, mathematics, languages, literature, and the sciences in the traditional way, to the utter exclusion of those arts and handicrafts that touch human life at so many points.

The people of the United States are enterprising enough in material ways. They have conquered the virgin soil of the vast continent, bridged the streams, tunneled the mountains, felled the forests, and in the place of the ancient wilderness set up a thousand populous marts, and made the waste places blossom like the rose; but in matters educational they are slow and conservative.

We remember how difficult it was to establish the equality of the sciences and the classics in our colleges. It is now thirty-one years

since Massachusetts placed upon her statute books a definite act making free instruction in industrial and mechanical drawing compulsory in all the schools of the commonwealth, and secured the services of Professor Walter Smith, of London, to make the experiment of introducing the study in the public schools.

Drawing is now universally recognized as the most practical and most valuable study in the school curriculum, the basis of all mechanical and industrial work, important in its relation to all other studies, and an indispensable aid in developing public taste and making artistic workmen. Many of us remember the struggle against ignorance, prejudice, and indifference which continued for twenty years or more before this important subject gained its proper recognition and held its deserved place in the schools of the land.

Manual training has also had its struggle. It has had persistently to fight its way to recognition as an educational factor. It has encountered at every step the stolid resistance of habit and tradition, which, like a baulky mule, stubbornly braces itself and holds back with all its might. Neither the voice of wisdom nor the onward march of events was heeded by our educators. Rousseau had long since taught the doctrine that learning is not education—that the true object of education is harmonious development. Comenius had said: "Let the things that have to be done be learned by doing them." Pestalozzi had defined education as "the generation of power." Froebel had said: "The end and aim of all our work should be the harmonious growth of the whole being." Kant and Hegel and Rosenkranz and Spencer had advocated higher aims for education and indicated better methods of teaching. Harris, Runkle, MacAlister, Woodward, Parker, and Hailmann were attempting to put into practice the principles of Comenius and Froebel, and trying to show, by actual demonstration, the value of handwork as an efficient educational factor. And still the traditionalists braced themselves, and pleaded lack of time, and expense, and claimed that the schools were already so overburdened with subjects of instruction that there was no place for manual training.

The advocates of the new education have ever held manual training up to the high plane of pure education, contending that it would maintain the true equilibrium of mental and physical forces; that it would be of great value in the building of the brain; that it would develop the reason, the judgment, the imagination, and the creative power. This has doubtless been well, but we have learned that the utilitarian idea appeals most strongly to the majority of people. Manual training must be tested among the people who pay the taxes, not by theory and speculation, but by its benefits to society, both in a moral, a social, and an industrial way.

We cannot longer ignore the practical phase of the question. Our

education, to be complete and effective, must concern itself with the facts and forces of the world in which we live. The industrial pursuits of life upon which the whole fabric of society rests must be taken into account. The imperative needs of that large majority of our future citizens who must of necessity obey the primal law and earn their bread by the sweat of their brow must be recognized in our scheme of education. It is not difficult to convince even the most conservative official that the permanent duty of the schools is to equip the student for life, active, productive, and aggressive. He will readily agree that education for the people must include what life calls for, when perhaps the more elevated purpose of the training—the pure educational process for the complete moral, physical, and intellectual development of the child—will be too much elevated to appeal to him at all.

Principal Gilbert Morrison of the Kansas City Manual Training High School said in one of his reports to his board of education: "The period of manual-training advocacy is passing, if it has not already passed, into the period of manual-training realization, improvement, and perfection." I must say that I cannot take that hopeful view of the situation. There has, indeed, been a great awakening since the advent of the kindergarten in this country, yet there has not been a revolution. Altho manual training has forced its way into many of the school systems of our larger cities, and its advantages are coming to be appreciated, yet the whole territory is by no means occupied. The conquest is not complete. Not all school administrators, not all the so-called educators, not all the people, are alive to the far-reaching influence of a rational system of education which shall bear close relation to the practical needs of life, which shall furnish that kind of training so essential to the welfare of all classes, and which puts into the hands of the large majority the means to earn a living.

The first need of the great majority of the people of these United States is ability to earn their livelihood, because the first duty of every man is to support himself by his productive industry. Educational provisions should always be adapted to present conditions and to the immediate need of the people. Manual training should enter into every school and form a necessary part of its curriculum, from the kindergarten to the university. The equilibrium of our national education should be so adjusted that it will include what life calls for. Industry should come in for its equitable share in what has been so long the exclusive empire of literary instruction. Let the avowed purpose of our whole educational scheme be to fit our youth for life, bearing in mind the inevitable prospect that nine-tenths of them must face a life of work with their hands.

Dr. Hailmann, in an able address delivered last winter before the Present-Day Club of Dayton, O., quotes some interesting statistics from

a report of Mr. Hodge, secretary of the international committee of the Y. M. C. A. He says:

Of 13,000,000 young men in the United States between the ages of 16 and 35, only 5 in every 100 have been prepared by education received at some kind of a school for their occupations; 95 have not been so prepared (1895). From a study of the subject . . . it is found that of every 100 graduates of our grammar schools only 8 obtain their livelihood by means of the professions and commercial business, while the remaining 92 obtain the same by means of their hands. The 8 are fitted for their wage-earning capacities by the training obtained in colleges, universities, and professional schools, while the 92, denied similar opportunities, are obliged in the great majority of cases and amid great embarrassments to fight their way for a livelihood by experiment and imitation of other workmen.

It may seem strange that the American people, who are so keen and alert, so energetic and full of push, should have been so long indifferent to the vital importance of special industrial education. The age is pre-eminently an industrial age. The spirit of our industrial, and even our professional, life is specialization. But the American people have been so absorbed in the development of the wonderful agricultural, mineral, and oleaginous resources of our vast domain that they have not considered our deficiencies nor realized how far we are in the rear of other nations in providing for the future and securing for this country the advantages of technical training that are offered freely to the workers of other countries. The rich products of our fertile soil, the abundance of valuable minerals in our mining regions, the vast supply of timber from our forests, the water power from our rushing streams, our wide expanse of territory, and all our other marvelous facilities for the accumulation of wealth, have been such prolific sources of profit that we have come to look upon them as inexhaustible sources of wealth, and have shut our eyes to any necessity for future provisions or precautions. But altho our exports of raw materials or products of the earth are valued at from \$500,000,000 to \$700,000,000 annually, yet it is altogether probable that agriculture and mining and lumbering and oil-producing must eventually decrease, and the people of the United States must of necessity become more of a manufacturing people.

Those who have observed the trend and progress of education in other countries know what might be learned from their example.

More than half a century ago France began to establish special schools for the purpose of fitting young men to superintend and develop her various industries. Young men were thus educated for various callings, and those possessed of superior qualifications were placed at the head of the leading factories and shops. If you visit the vast porcelain factories of Sèvres, you will find that the rules for their management are issued by the minister of instruction, and you will learn that these great works are conducted primarily as an educational institution, and that the commercial value of their immense output is held subordinate to the

purpose of supplying other establishments with skilled workmen. The technical school at Limoges, the center of porcelain industry in France, is a state institution. The famous school of theoretical and practical watch manufacture at Besançon is founded at the expense of the city which is the seat of the industry it is designed to promote. The Central Technical School in Lyons is under municipal control, and its aim is to educate skilled mechanics and workmen, foremen, overseers, and manufacturers for the various industries at Lyons. Schools of arts and sciences are supported by the state in several cities in France, and municipal apprentice schools for special trades, such as upholstering and making furniture, carriage-making, watch-making, weaving, dyeing, manufacture of mathematical and electrical instruments, the making of tapestries and mosaics, are numerous. Such schools have been multiplied until they exist in all the cities and manufacturing communities in France, and it is not a wonder that her skilled labor has brought in its account against the world and that every civilized nation on the globe has paid tribute to her prosperity. In all kinds of commodities which depend upon beauty of design and artistic finish, France long held the monopoly in the markets of the world.

You know the history of England's great transformation of her industries from a condition of crude inferiority to one of the greatest refinement. From the humiliating lesson which England learned at her great exhibition in 1851, she set herself resolutely about the task of building up, by means of definite industrial art training, the manufactures and art products of the country. This was kept up for a quarter of a century in no half-hearted, haphazard way. The revenues of the realm were freely expended. The royal family, the Parliament, the manufacturers, the artists, the educators, the guilds, and the workers of England all co-operated. Appropriations for works of art, for museums, and for technical schools were made with a rare liberality. The greatest efforts were made to discover and encourage talent, to train to efficiency designers and artisans to meet the demands of the times and to aid in regaining their lost prestige in the industries of the world. The results of those combined efforts of a great people imbued with an earnest purpose were wonderful. Never before had there been presented such a combination of facilities for industrial supremacy. With her accumulated capital; her abundance of coal, iron, and cheap labor; with her trained mechanics, her enterprising merchants; with her ships and her sailors to carry her products to the ends of the earth, she seemed to have fulfilled the boast of her historian that she was the workshop of the world.

But other continental nations looked upon the prodigious increase of the British manufacture with some apprehension, and they were aroused to efforts to compete in this great industrial contest. They all resorted to the same means, and speedily began establishing schools of various

names, but with the same general purpose, adapted to their local necessities, and for the industrial education of the people.

Belgium has a technical school at Tournay for instruction in lock-making, and for iron and copper founding and molding ; one at Verviers devoted to weaving, dyeing, and chemistry ; while in each of the cities of Ghent, Antwerp, Ostend, Bruges, Liège, Charleroi, and numerous other towns throuout the little kingdom, there are established trade schools in each case suited to the industry of the place ; all subsidized by the government or supported by the municipalities. In addition to these there are many apprenticeship schools adapted to the special industries of weaving, training designers and artisans for those beautiful products of the loom for which the country is famous.

In Germany the schools for training workmen are among the most remarkable in Europe. Schools of design, polytechnic and industrial schools, are as numerous as any other kind of schools.

Trade schools are numerous in Switzerland, in the Netherlands, in Sweden, Denmark ; and have been introduced to some extent in Italy and Spain.

Russia, tho far behind other European nations in education and civilization, has her Imperial Technical School at Moscow, the Alexandria Technichal School at Tcherepovetz, the School of Trades at St. Petersburg, the Strongenoff School (from which we got our idea of manual-training schools in this country), and others of a like character, which are sending forth every year hundreds of young men well educated and skilled in the civilizing arts of life.

The aim and object in every one of these countries cited is to improve the industries, by training up skilled workmen and diffusing them into all branches of their manufactures, trades, and commerce.

These foreign examples must have significance for us. We are richer in natural resources than any of them ; but we have not kept pace with other countries in fostering our home industries. We have imported the articles of taste and luxury, and imported the skilled laborers, relying on our vast product of raw material to give us the balance of trade ; and so it has. American enterprise and pluck have supplied all deficiencies. Our marvelous resources have enabled us to lavish our treasure upon other countries for commodities that could as well have been made by our own artisans, had they been properly instructed in the knowledge of their arts. And the raw material for many of the imported commodities is produced in this country, exported to Europe, and returned to be purchased by us at four or five times the price we received for it. As a consequence, the skilled labor abroad receives the benefit of this great increase of its value, while our own people swell the ranks of the army of the unemployed for lack of skill to produce it.

In a far shorter time than was required of England, America might,

if she would but make the effort, put herself into the front rank of the manufacturing nations of the earth. Our economic advantages excel those of any other country; our people are hardy, intelligent, ingenious; but our magnificent inheritance of vast domain and all our rich materials for economic aggrandizement have been in part rendered of no avail, because we have neglected the means by which the higher industries are fostered and developed. Our cheap lands for homesteads are becoming scarcer every year. The operations of agriculture are now wrought by costly machinery which has revolutionized the old system of farm tillage. We have witnessed the passing of the apprentice system; we have seen the marvelous development of machinery which seems to make men into machines and make them simply serfs to capital; we have seen a revolution in the methods of production, transportation, and distribution. The time has come, and now is, when we should revolutionize our methods of instruction in a way that shall substitute industry for idleness and skill for ignorance in the useful pursuits of life.

We believe that Americans in trades of any kind are brighter, more inventive, more adaptable, more progressive, more productive than the people of any other nation. Give the American the thoro training of his rivals, and his native keenness of insight, his adaptability to circumstances, his readiness of method, will enable him to lead the world in those higher qualities which all admire and which are so essential to national progress. But our American principle in education has so long been general training rather than specialization, culture rather than technical education, that the artistic trades and the skilled trades have been practically closed against American youth.

The tendency to crowd into the cities is marked, but bear in mind Mr. Hodge's statistics, and remember that, while of the average hundred young men in the cities five only are prepared by their education for their profession, business, or trade, ninety-five are not. It is stated also, on good authority, that there are three times as many skilled positions open to young men as there are men qualified to fill them, while there are three times as many awaiting commercial and professional positions as there are places to be filled. But our manufacturers meet these conditions by an increased use of machinery rather than of men, by importing from foreign countries a few skilled laborers, and by employing women and children at small wages to do the work which men should do at larger wages; by encouraging machines of iron and limitation of processes rather than by educating the youths in those lines that will make them accomplished and artistic workmen, increase their earning power, and add to the general prosperity of the country. "Cheap labor, not education; mechanism, not skill," has been their sordid cry.

We have made considerable progress in the right direction, but we haven't covered the whole ground. We have many technical schools in

the United States quite similar to the polytechnic schools in Europe and the agricultural and mechanical colleges in the several states which have accepted the aid of the land grant made by Congress for that purpose have done much to advance the movement for education in the industrial pursuits and professions. But technical courses in these schools are designed for professional purposes and for professional men alone. They are admirable, and they train a set of masters of industry that are absolutely necessary to a country that has such extended systems of railroads, such immense steel bridges spanning the streams, such tunnels to bore, such sky-scrappers to rear, such power-houses to construct, such pipe lines to run from oil fields to the seaboard, such ships to build, such mills and furnaces and factories to be managed. These schools train the leaders, but not the artisans. They are a most interesting feature in our educational system, and they are helping to solve the industrial problem.

Many who favor manual and technical instruction are not ready to urge the establishment of apprentice or trade schools at the expense of the state. They hold that the state should go no farther than to furnish a general industrial training, and this on an educational basis; that for anything further private beneficence should furnish the ways and means. Not so thought England, when she organized her art and industrial schools; not so thought France, Germany, and Switzerland, when they established their apprentice schools and their trade schools; not so thought the hundreds of European municipalities which revived their deteriorated local industries and created new ones by the establishment of trade schools.

The education of a people must have unity as well as logical continuity. Technical education should not be separated from general education. Intelligence and skill must not be put asunder. Education is a means to an end, and only as a means to an end does it pertain to the state.

Whatever education is necessary for the general welfare it lies within the province of the state to provide. This is the broad proposition on which public education rests, and no question can be raised as to the right of the state to teach any branch of knowledge which will promote the general welfare. No logical line can be drawn at any given point which limits or restricts the inherent right of the state. The right to establish higher institutions of training, to give opportunity to the ambitious student in one hundred who wishes to fit himself for a learned profession, is not questioned; neither can the right of any state or city to organize special schools, or to promote important industries, be disputed on any logical grounds. The extent to which the state or municipality should carry its education is determined entirely by its own needs (or its own judgment of its peculiar needs) and its own ability, financially and otherwise, to provide for those needs. Whether a city

shall provide laboratories and shops, and instruction in the arts and trades, or whether it shall do without this industrial feature of modern education, is for the city to determine, just as it determines the question of paving, sewerage, and street lighting.

Let the state see to it that the right kind of education is provided for its great army of workers; let the state suppress idleness as it does ignorance; let it provide trade schools rather than workhouses and prisons, and this country will make such advances in the arts and sciences, such strides toward a higher order of material prosperity, as some of us have never dreamed of.

EDUCATION FOR THE TRADES IN AMERICA—WHAT CAN TECHNICAL HIGH SCHOOLS DO FOR IT?

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The question of education for the trades is only a part of the larger question of technical education, which includes every kind of teaching that may have a direct and practical influence upon the varied industrial life of our times. Such a question cannot properly relate to all grades of schools from the primary up; but it may concern the secondary schools, and possibly the upper grades of the grammar schools, as well as the colleges of technology and of commerce. Broad and general principles should control the earlier education with little or no reference to special callings; but so soon as the youth comes to the point in his career when, considering his own capacities and the conditions which surround him, he ought to face the question of fitting himself for the best form of self-support and service to the community that he is capable of attaining, then education may properly take on more or less of the characteristics of special training. This principle has long been recognized, and for the comparative few, who have unfortunately been called the favored class, schools have been provided, both at public and at private expense, whose chief function has been to furnish their students with the intellectual equipment needed for further study in colleges or professional schools. That much of the teaching in these schools is of a general nature—intended to assist in the all-around development of the man or woman, rather than to begin the creation of the specialist—cannot be denied; but the ultimate object of American colleges, whether classical, scientific, or technical, and consequently the ultimate function of the preparatory schools, tho rarely admitted in either case, has, nevertheless, been in large measure to give their students that information and training which should enable them to earn their way in some form of business or professional life. This tendency of American schools toward practical

aims and methods has been assisted by the rapid and successful development of the elective system, which has caused the so-called broader features both of collegiate and of popular education to assume even less relative importance, yielding to the growing demand for that instruction which may be quickly turned to practical account.

That there is a distinct and just demand for a continuation and extension of the reform already begun, which is to bring the work of American schools more closely in touch with the life of the times, cannot be doubted. The remarkable growth of higher technical schools, the success of the manual-training movement, the prosperity of private commercial schools and correspondence schools for mechanics and other workers—not to speak of the occasional trade school—furnish sufficient evidence that all, or nearly all, of the various forms which practical education has thus far assumed have come in answer to a natural and extensive demand. But that all these schools fully realize all that is sometimes claimed for them cannot for one moment be maintained. We must recognize their value, but at the same time acknowledge the incompleteness of the answer which they furnish to the general industrial needs of our time.

The higher technical schools as such have reached a high degree of excellence in this country. They compare favorably with the best in any other country; but their main function is to train men for the engineering professions who shall intelligently *direct* the application of natural forces to industrial and economic problems, securing the greatest possible efficiency by taking full advantage of every new discovery and invention. The graduates of these schools are well equipped in science, both pure and applied, and qualified to investigate new problems; but their proper work is to plan, advise, and direct. Generally speaking, their education stands in the way of their serving manufacturing corporations as foremen and managers, positions which many of them would be glad to secure, because of unwillingness at their age and with all their knowledge to begin at the bottom of the business and acquire, patiently, the necessary details. They have been educated away from the rank and file of the great army of industrial workers. Shop foremen say that they prefer to teach boys, who realize that they have much to learn and are willing to take the time for it.

I have said that the graduates of these schools of engineering fill a comparatively limited, tho important, place in the industrial world. But, notwithstanding this fact, there seems to be a tendency in technical schools of a lower grade to aspire to the higher rank, forgetting that they were organized upon a more general educational basis and with the avowed purpose of serving industrial needs in the broader sense. As examples, one may recall a certain school in Chicago, one in northern New York, one in Maryland, and one in California. This tendency, it seems to me, is to be lamented. The great need of our time is more

technical education of a secondary type; there is quite enough of the collegiate grade. We must lay the foundations broad, as well as deep, if, as educators, we are to meet fully the responsibility laid upon us of contributing our share toward developing and maintaining the industrial supremacy of the nation. To do this we must work thru the people's schools—the public high schools in which manual training is emphasized. Here is where a good part at least of the great work for industrial education must be done.

If we examine into the causes which have operated most powerfully to bring the manual-training movement to its present state of development, we shall find, I think, much to justify the proposal to teach trades in the technical high schools. We flatter ourselves sometimes, I suspect, that the educational argument for manual training is a complete answer to those prejudices which have so long held up the traditional training in the so-called liberal studies as educationally superior to the results of technical instruction, and that it has at the same time fully satisfied those who have been clamoring for the practical school. While I am in hearty accord with the theory of manual training as an educational principle, and would pay all due honor to its many noble advocates whose influence has surely been great, I cannot ignore the fact that the practical argument has had greater weight than the educational with the average citizen and with his boy. Manual-training schools have come to stay, because there is a demand for that form of education which shall connect itself with productive industries and with the employments which the youths of our land are by force of circumstances bound to follow. They are one result of the development of our civilization, and are as inevitable as other results of the operation of natural laws. It is our duty to appreciate their full mission and see that they fulfill it.

A clear recognition of the demand for the practical in education would relieve us of the supposed necessity of proving that manual training is as intellectual, as ennobling, as uplifting as training in the liberal arts. Since we have this form of education well established, let its general educational basis be admitted, while we give our attention to making it more effective in those directions in which its peculiar value seems to lie. In doing this we shall not by any means set aside educational principles. We may look upon educational manual training as a necessary intermediate step in the growth of modern educational philosophy and practice; but we have not, it seems to me, rightly conceived the true destiny of the practical movement in education, if we are content with introducing manual-training departments into the traditional high school, or, indeed, with organizing the independent manual-training high school so-called, if such schools do not somewhere in their curricula give greater emphasis than has yet been given, generally speaking, to technical education.

The time-honored argument that this or that study is to be pursued, not because it has any practical value, but simply for the mental discipline it affords, is not now generally regarded as sound; but it must be admitted that we do not better it much by substituting for the discipline of books the discipline of a few mechanical exercises which, in themselves, have very little practical connection with the industrial world. This criticism is in full accord with modern educational theory. It is coming more and more to be recognized among educational experts that educational values should not be estimated altogether according to the training which a certain study affords while it is being pursued, but rather by the consideration of whether that study or that exercise is likely to be continued in practical life. It seems strange that so little attention has been paid hitherto to a question of so great importance. If the school is to fit for life, why should it not teach the youth what life demands in maturer years? There has always been a stereotyped answer to this question, namely, that it is the function of the school to furnish broad and general discipline, leaving the more practical lessons to the experience of actual life. But if the youth may begin with the actual experiences of life in school, so to speak, and thereby gain, not merely equal, but better, disciplinary advantages, it seems to me that the old ideas of educational values will need to be amended, if not altogether abandoned.¹

I suppose we may take it for granted that the dogma of pure mental discipline has been well-nigh demolished. This is one great point gained. No modern teacher considers that a study is of great value if it furnishes strong mental discipline in school regardless of all other questions. Such a study may, indeed, be very valuable as a means of discipline during school life, but if it is to be entirely dropped at the end of the school period, and especially if the peculiar mental processes which it furnishes are not to be carried on in after-life, no matter how valuable it may be in itself as a study, it loses greatly in educational value when compared with another study which is equally valuable as a school exercise, and at the same time likely to be carried into practice when the school days are over. Now, while it will not be questioned that the introduction of the manual-training element has enlarged the educational output of our schools, it is equally clear that there is a real danger that the manual-exercise element as such may be open to the same criticism of comparatively inferior educational value as is now being generally admitted to be true of the old doctrines of mental discipline.

But these educational considerations, however valuable, are not the only ones to be kept in view. The real motive power behind the whole

¹ See paper on "Some New Aspects of Educational Thought," by SUPERINTENDENT THOMAS M. BALLIET, *Proceedings of the American Association for the Advancement of Science*, 1899.

matter is the demand of the practical age in which we live. This must influence all educational thought, and it certainly has modified it to a considerable extent in recent years. One cannot, of course, claim that the great advances that have already been made in technical education are due wholly to material or mercenary motives. Probably the best expression of the practical element in education has been due to a broader view of educational principles and an almost unconscious drift in the direction of the technical element. But, after all this is admitted, I still believe it is the urgent demand for the practical which has shaken up the old educational systems, and called for a thoro study and readjustment of educational values. There can certainly be no doubt about the demand for industrial teaching, and especially for that part of it which has been described as education for the trades. One needs only to ask his next-door neighbor, if he be a manufacturer, to be told that the situation in industrial quarters is alarming, and steadily growing worse. We have an increasing army of inferior workmen; but skilled mechanics who are not specialists—i. e., the all-round machinist, carpenter, pattern-maker, blacksmith, etc., of former days—are few in number, and are, for the most part, advanced in years. Some of them were trained under a system which, in this country, is practically gone. Others have got their training thru a combination of fortuitous circumstances which can hardly be called a system. They are the lucky few who have managed somehow to circumvent the tendencies of the age, and secure what has remained of the old-time shop instruction, which was universally the pride of our industrial fathers. Young men are not, as a rule, being trained to take their places; and the manufacturing industries are so conducted in our time that there can be no adequate provision made for supplying the need which was formerly met by the apprentice system. In every part of the country the great industries are seeking in vain for American-trained foremen and mechanics of the old-time type. Our shops are filled with foreign-born, unskilled workmen, often under the direction of experts born and trained abroad, while the grammar schools and high schools are every year sending out vast numbers of our own boys utterly unfitted to enter the shops excepting in the very lowest capacity. But, as has already been pointed out, there is little or no opportunity for them even in this lowest capacity, since there is no apprentice system. Manufacturers, superintendents, foremen cannot afford to be bothered with them. They are entirely out of adjustment with modern industrial conditions. American boys ought to have the opportunity, and they ought to be fitted to enter the trades and become skillful, thinking mechanics, greatly superior to the foreign-born workers who now fill our shops. How is this result to be brought about? The modern system of intensified production cannot be changed. An apprentice system like that which has passed away cannot be revived. The higher technical schools are concerned

with questions of a different nature, and cannot directly meet this need. The various efforts made thru correspondence schools, Christian association schools, night schools, can never furnish a complete answer to the real problem. *It is a question of public education* just as surely as training for commercial life, or any other form of employment for which our youths now find more or less adequate training. What department of our public-school system, as now organized and carried on, can more properly undertake to solve this question than the manual-training school of the higher grade?

But in this, as in all educational matters, it is often easier to see that a certain result should be accomplished, and, indeed, to state thru what agencies it may be brought about, than to map out a plan of action along the desired line which shall be thoroly practicable. If it be admitted that our educational system ought to be adjusted to industrial needs and demands in the direction of the leading trades; and if it be admitted also that the best medium, at present, thru which this adjustment may be brought about is the manual-training or secondary technical school, the essential part of the problem still remains unsolved until we have shown more definitely what can be done by these schools, and how they are to do it. This question cannot be adequately met within the limits of a brief paper, nor should it be left entirely unanswered.

At first thought the question seems appalling. Teach the trades—men exclaim—all the trades, in our manual-training schools! Impossible! we are told; and if one admits the extreme conception of industrial education which some hold, there is some ground for the objection that such education is impracticable. But education for the trades does not necessitate that highly specialized instruction implied in the term “mono-technic” or “trade school,” as commonly understood. And, if we examine closely the present status of the trades themselves, we shall find that in the very field we propose to enter many of the supposed complications and difficulties vanish on approach, while others may be easily eliminated.

The decay of the apprentice system is not the only result of the changes in the industrial methods. Along with it have perished many of the trades as known in former times. The wonderful development of machinery and machine methods, especially in this country, and the realization of the immense profitableness of rapid production thus made possible, have led to such a degree of specializing in the trades, thru the principle of the division of labor—to such a development of trades within trades—that many of the original, all-round trades of our fathers have been lost. Take the single example of the wood-working trade. Instead of the carpenter, cabinet-maker, and pattern-maker, which was the old division, we now have the plain sawyer, band sawyer, turner, pattern-maker, molder, carver, framer, lather, stair builder, and joiner or finisher, each

skilled in his own specialty, but in no other. These may be called the ten distinct wood-working trades; but in reality there is scarcely more than one of the original trades left, viz., pattern-making, and that has, and always did have, a limited field. The same thing is true of all the so-called machine trades.

In European countries such an intensified division of the fundamental trades is not found. Germany is still a country of all-round trades, altho she is rapidly developing her manufactures on a large scale, and is even now in many lines successfully competing with us in the world's industrial markets. Her class system enables her to retain her general trades as practical training schools for her artisans; and her lesson to us is to be found in this fact more than in her trade schools, in which, for the most part, she offers to her industrial workers instruction in the common branches. Her mechanics, even tho they become specialists, are thus broadly educated in technical, as well as in more general, directions. They are greatly superior to American machine hands. Had she equal natural resources, she would soon distance us in the industrial race, and may, indeed, as it is. In her system of industrial education, as well as in her social conditions, she already has an immense advantage in the field of trades. If we would maintain our industrial supremacy, we must supply in our educational system some equivalent for the technical training furnished by the old-time apprentice system in our own country and by the fundamental trades abroad.

But what can we do? It is clearly impracticable to teach highly specialized trades in our schools; nor would this be right. Specialization is the result of high-pressure production and has, on the whole, made against the technical education of the individual. The schools should not, if they could, fall into line and help along an evil which they ought to strive to remove. Education may recognize the problem of the mill and give it due weight; but in the last analysis its duty is to seek the good of the individual. This high duty demands that the individual be given a chance to develop all his powers, and be limited only by natural conditions, to the end that he may make the most of himself in whatever line of activity circumstances may place him. If he is to become a machine specialist, his education should be directed to giving him as much as possible of the broad training useful in any calling, but it should not fail to give also that technical preparation which shall enable him to learn, without waste of time, to do whatever is demanded by his specialty, intelligently and with the highest degree of efficiency. The manual-training school, while it should constantly hold before him the best ideals of citizenship, and offer him studies which shall cultivate those ideals, should also develop him along technical lines, both in theory and in practice, by exercises in both lines of work which are consistent with modern industrial methods. He should not be taught anything which

he will have to forget, or which will be of no use to him when he gets to work. No time should be wasted in exercises for mere discipline. His education should furnish him with the essential practical elements given by the apprentice system, and add much of a general nature which that system did not give.

With this conception of the character of the education needed for the trades, it will be seen that we have not to consider the highly specialized trades of our time, but rather the principles and operations which are fundamental to certain groups of these trades. 'But these principles and operations should be so thoroly mastered that entrance into the field of the specialist shall be made very easy. No one will pretend that this is the case now, even in our best manual-training high schools. The time devoted to mechanical work during the four-years' course is about ninety working days of nine hours each, divided about equally between wood-work and iron-work, each of which is subdivided into two or more lines of work. Thus each line of work has scarcely more than the equivalent of one solid month's time devoted to it. Compare the technical product of such a course with three or four years of apprenticeship in any one of these lines! No wonder that practical men say of the manual work accomplished in many of our schools: "It's well enough. My boy likes it, and goes to school more willingly on account of it; besides, he learns quite a number of things that make him handy about the house."

It is not reasonable to expect so much time to be devoted to mechanical work, even in our best schools, as is implied in an apprentice system, nor is this necessary. In the old shops, for the first job, boys were often given a barrel of nuts to tap, and for the second job a second barrel of nuts to tap, and for the third two barrels of bolts to fit to the nuts. Such intensified practice as this is not called for nor admissible in a school, but it contrasts strangely with the prevailing theory of manual training that the educational, and therefore the entire, value of a given exercise is exhausted after it has once been laboriously worked out. For a thoro mastery of technical principles there ought to be some repetition; and both in plan and execution the question of economy of material and time should have an important place. This would be one step in the direction of teaching for the trades; the second step should be to allow specializing for three or four years in one line of mechanical work—say, pattern-making, cabinet-making, forging, machine-shop practice; the third step should be to double the amount of time devoted to mechanical practice by allowing voluntary work after the regular school hours; the fourth step should be to bring the other school exercises—especially those in science and mathematics—into closer correlation with the special mechanical work being done. With these four changes accomplished in a well-equipped school, we may then claim to have done some-

thing in educating our boys for the trades. Let there be, if possible, in addition to this, a single post-graduate year, during which a boy may devote all his time to his chosen line of work, and the problem of making up for the loss of the old-time apprentice system in certain trades is practically solved, while we have secured at the same time four years of general school work which that system could not permit.

In conclusion, it may be well to say, lest I be misunderstood, that I do not take the ground that education for industrial pursuits is, or ought to be, the sole object of the manual-training schools; nor do I believe that the manual-training school is the only one where such teaching may properly be done. We probably shall make in due time a place in our school system for the trade school, in which a much more complete and specialized line of industrial training will be carried on than it is possible to mingle with the standard features of the manual-training or technical high school. In the meantime, the schools we have ought to rise to their full duty and recognize a need which they can in some measure meet. But we must hold to the fundamental principle involved in that educational trinity—the hand, the head, and the heart; nothing complete in education without these three. We must maintain the dignity of labor, throw aside mere mercenary motives, and uphold the ideal practical school by whatever name it may be called, and make it, no less than other parts of our great system of education for the people, a means of expansion into a higher life.

DISCUSSION

CHARLES R. RICHARDS, Teachers College, Columbia University, New York.—In discussing the very able papers that have been read this afternoon, I find myself in the apparently anomalous position of one who believes most thoroly that the instruction of the schools should be based on the conditions of actual life, and yet who does not feel that manual training in the high school can or should be made to serve the purpose of trade training. On the other hand, I find myself very thoroly in accord with most of what has been said in these papers, with the single large exception that, in my judgment, the thing so ably discussed is not trade training at all, but something very different.

In approaching this subject, it seems to me that we need first of all to define very clearly and very carefully what we mean by certain things. In the first place we need to know just what is meant by trade training; and, secondly, in what the demand for trade training consists. With these facts established, we can then examine most profitably in what way the manual-training high school is related to this demand.

Trade training, I take it, is such a training as will allow the worker to enter at once into practical and profitable work at a trade—not as an expert journeyman, but with a degree of practical skill that an employer will deem remunerative. Any training that does not fulfill this condition surely does not begin to meet the problem in its fundamental requirement. To fulfill this condition means continuous practice at one kind of operations for a very considerable time until the special skill and judgment necessary for that

particular class of operations are gained. Direct efficiency in this field means concentration rather than breadth. It means muscles and eyes and judgment trained by habit to deal almost instinctively with a certain method of manipulation.

On the other hand, from whence comes the demand for trade training? Who are the boys, and girls for that matter, that are to form the army of trade workers and who need such training under the present economic conditions? From an experience of ten years in trade-school work, my answer to this is that they are the boys below and outside of high-school possibilities. They are the boys and girls that must become wage-earners directly after the compulsory school age. It is these, and these only, that form, and from the nature of things must continue to form, the great bulk of the manual workers of the country. For the majority of the boys and girls who feed the ranks of this enormous section of our population a high-school course is, today at least, an economic impossibility.

Considered purely from the economic side, it seems to me that the proposition contained in the report of Superintendent Maxwell, of New York city, for the year 1900 is the most practical suggestion for dealing with trade training in connection with public education that has yet been put forward. In this plan it is proposed that the pupils in the crowded tenement districts of the East Side of New York shall be taken out of the regular elementary school at the end of the sixth year, when they so elect, and allowed to spend the next two years, or until they are fourteen, in learning, not only history and composition, but some trade whereby they can earn a living.

Such a plan is, of course, capable of only limited application under special conditions of population, and I am not sure that even then it is a plan that would fit into our American ideas of education or prove practicable in operation; but it has the virtue at least of aiming directly at a class that actually needs and will profit by training for the trades, and in a way that would make it economically possible for this class to be reached.

These two facts—first, as to the requirements of a trade training, and, second, as to the economic limitations that rest upon such training—seem to me to be at the bottom of this question under discussion.

Consider for a moment the nature of the work that has thus far been found practicable and valuable in the high school. We teach the elements of a very few typical trades, or rather the elements of certain general groups of trades. For the different branches of handwork taught in the manual-training school do not actually represent any special trade as practiced today. The machine work perhaps comes nearest, but even this is only suggestive of the general processes entering into the field of machine construction.

The essence of industrial operations today is specialization, and preparation for practical trade work, to be effective, must take on this same character. If we should attempt to transform the shop work as represented in the manual-training schools at the present time into real training for a few trades, and carry out the instruction, both as to time and methods, so as to make it effective, we should come to a very narrow field indeed. Besides greatly narrowing the scope of such work, we should, on the other hand, so reduce the possibilities of broad training in other directions as to lose the distinctively liberal character that these schools now stand for.

These are the facts that seem to me to render it impossible for manual training in the high schools to become in any sense a means for the practical training of artisans, or even to scratch the surface of the real problem of trade training.

This is a negative view, but there is another side to this question in which I believe manual training bears an enormously important relation to industrial activity and trade development, a relation, in my judgment, of vastly more practical significance than the preparation for a few trades.

The reports of the eleventh census show that between 20 and 25 per cent. of the

whole number engaged in gainful occupations in the United States are employed in manufacturing or mechanical industries. They also show that the value of the products of such industries is over half of the total value of the productions of the country. This means that this country of ours is just now passing from an agricultural nation into a manufacturing nation, and, indeed, taking a place where it is beginning to command the markets of the world. Furthermore, it is on this side that the future development of our wealth and resources must more and more take place.

Why, under these conditions, must we seek an economic justification of manual training in the high school in the training of a comparative few for certain special trades, when there are nearly 25 per cent. of the workers of the country engaged directly, and many more indirectly, in all sorts of trades and mechanical operations? Is it not a thousand times of more practical and economic value to represent in the highest public school such instruction as will bring to great numbers of future wage-earners a broad insight into and understanding of the vital facts in this whole field of activity, so that they may be prepared to enter intelligently into relations with this industrial world and to become efficient leaders in its various branches?

If preparation for social life means anything as an aim of education, is there not fully as much need for including such instruction in the opportunities of the high school as for providing instruction in history, science, or mathematics? Indeed, is not such work carried out in a broad way simply the logical application of industrial history, science, and mathematics to the life of today?

But to reach such broad results such work must be dealt with in a broad spirit. It must recognize that the outlook of the worker should be enlarged from his special task to the significance of this task in its relations to industry at large. Not only the concrete result in wood or iron should be considered, but materials should be traced back to their sources, and the processes by which they are made available should be studied. Furthermore, some comparison should be made of the complex and specialized processes of manufacturing with the simple experiences of the school shop; and finally such instruction should find some way to make clear at least the elementary principles and relations that govern the organization and operation of modern industrial establishments.

Such a school experience would give knowledge and insight fully as much as skill, and it would give insight into the principles governing all industry as well as acquaintance with the special branches of handwork practiced in the school. It would give a preparation that would fit its graduates to enter intelligently into the relations with the industrial world, and to understand and control its forces rather than to practice a special trade.

Of course, such work has a vocational value, but it is vocational value of a broad type. It is vocational just as all work in the high school is in a large sense vocational. The constant tendency to arrange the high-school curriculum upon a vocational basis is strikingly evident from a study of the evolution of the high school in this country.

The first secondary school in America was, I believe, the Boston Latin School, the object of which was to prepare for Harvard College. This school had a distinct vocational purpose—it was a stage in the training of men for the learned professions, a preparation for admission to Harvard College. In the course of time, when a classical college course was no longer the object of all those who desired a secondary-school training, the English High School was established. The founding of this school represented again the vocational influence. Its aim was to afford a training nearer to the life demands of those not going to college. Later came the provision of departmental courses in the high schools—the classical course, the English course, the scientific course, and sometimes the commercial course—all signifying the effort to still further meet vocational requirements; and finally we have the system of elective studies, which seems to provide the final step in the adjustment of high-school instruction to the life needs of the individual.

It is in this broad sense, it seems to me, that manual training in the high school is related to the question of vocation—not as a training for work at a special trade, but as an instrument to develop a keen and intimate understanding of modern industrial practice and conditions. Furthermore, it seems to me that this office of manual training in the high school is of infinitely greater economic meaning than any attempts at trade training, even if the latter were practicable.

On the other hand, it is a training of this scope and character that the present organization and equipment of the manual-training high schools are fitted to develop and extend. If the attempt is made to turn such schools into special trade schools, I believe they will fall between two opportunities and lose their position as true high schools, on the one hand, and fail to become trade schools, on the other. I believe, on the contrary, if we resolutely set our faces toward making the work of these schools contribute to a broad and real insight into the fundamental facts and relations of the industrial world at large, that we shall be giving these schools a place in American education that nothing can shake, and that we shall be doing a greater service to the industrial progress of the country than is possible by any other educational means.

CALVIN M. WOODWARD, director of Manual Training School, Washington University, St. Louis, Mo.—I have enjoyed listening to these papers and this discussion very much. Of course, I agree with four-fifths of what has been said. I agree that the organization of our school work should be such as to enable every boy to make the most of himself. I believe that is what our education is for. It is what our high schools are for, and what all our schools are for. Every system must be “open at the top,” so that the most enterprising and ambitious boy shall feel that the world is his, or the opportunity to make it his belongs to him as a birthright.

Now, in regard to the extensive study of narrow occupations, referred to by Mr. Curtis: In Europe they are called trade schools, and, as Mr. Richards says, there are scores and scores of them. They are training boys for very narrow occupations. I have visited several of them. The manufacture of a certain kind of goods is the object. It may be the manufacture of magnetic needles; it may be the manufacture of microscopes; it may be locks; it may be the manufacture of some line of goods which the community wishes to establish and for which it wishes to have skilled workmen. The pupils are given a little mathematics, a little literature, and a good deal of work; and that work applies directly to the articles proposed to be manufactured; and after they have learned to manufacture them, they turn out goods for the market; and those boys keep to that business the rest of their lives.

That is a kind of trade school; it is narrow, it is definite, it is certain, and there is no practical way out of it. That school is closed at the top. That kind of a school we do not want in America. It is utterly opposed to the genius of our institutions.

There is another kind of trade school in Europe, a little broader than that, which I should like to describe. I visited a school in Paris, on the Boulevard de la Villette, a school where they take boys at about fourteen and keep them three years. It is a trade school. They teach, I think, four very narrow trades. They are not trades in the broad sense in which Mr. Richards uses the term, but they are occupational trades—vocation trades or courses. They give the boys a little mathematics, a little French history, a little French geography, a little drawing, and a half-day at least of tool-work. At first they send the boys thru a series of four shops. One is some kind of machine shop, where they have certain articles in view; another a kind of forging shop, another a cabinet shop, and another a locksmith shop. The boys go thru that series of shops, spending a few weeks in each one, sampling it, as it were, to see which they think they are cut out for; and this sampling business is all done in the course of one year. They make up their minds at the end of the year as to the trade they want to learn, and from that time forward they devote themselves absolutely to one thing until the end of the school.

When they leave, they go right to work at that trade and nothing else. They never swerve; there are no exceptions to this rule. Now, you can easily judge of the propriety of forcing a boy of fourteen to make up his mind for life; because there is no going back after he has once decided. I asked the director of the school, after looking it all over and seeing just what the plan was: "What do you do with the boy who finds he is not fit for any of these occupations?" He replied: "We haven't any of those boys here, sir! These boys have got to learn one of these trades, and then work at it the rest of their lives."

Now, there is nothing open at the top there. In Europe, as you know, a boy very often inherits his trade as he does his name, but in America we do not believe in that. We do not want anything of that sort in this country.

I wish to say fairly and squarely that I am not in favor of converting the manual-training high school into a trade school. I want to keep it as broad and as generous as our civilization. I want the career of every boy and every girl who goes into it to be the right one, and I do not want to take advantage of an immature and ignorant boy and force him to decide what sort of business he is to do in the world, when he is utterly unfit to make such a decision. I say the freedom of the boy, and his right of choice after he is prepared to choose, are inalienable, and we have no business to take them away from him. It is one of the great functions of a high school to let a boy discover himself. I am very glad to hear Mr. Warner say that, after all, what we have got to do is to teach the processes which underlie a group of trades. That is just exactly what we do in every well-organized manual-training school, whether it is on a private basis or whether it is a public free school. That is, we teach the fundamental mechanical elements which underlie the use of the various materials with which our American industries have to do. We do not teach particular trades, but we do teach the alphabet with which all those trades are spelled out; and that is the way in which we prepare them for intelligent choice, and for going out into the world in many different directions.

I have had a great deal of experience in this matter. I have conducted a manual-training school for twenty-one years. I have had thousands of pupils. About one-half of them have completed the course and received the diploma of the school, and gone out into the world and gone to work. Now, what are they doing? They are doing everything that comes to the hands of honorable, skillful, and high-minded men. Those young men have gone into all the occupations of life without bias and without prejudice and without difficulty.

This problem in regard to the trades is being solved in every community where the manual-training high school exists. I do not quite agree with Mr. Richards here. I believe we are meeting, and are destined to meet, the demand for artisans much more fully than he seems to think. I have immense faith in the ultimate success of manual training to meet all our industrial wants, but the number of manual-training schools must be very greatly increased. The doors must be open to every boy who reaches the age of fifteen and who desires it. The number of those who cannot afford to take it is diminishing. I believe we are bound by and by to give at least 50 per cent. of all the boys in the community manual training in secondary schools.

I should like to say a word in regard to Mr. Maxwell's scheme. It seems to me that one fundamental defect in it is that it begins far too early. What can you do with boys of the seventh grade toward trade training? I do not believe you can do much with them at that age. They are too immature. They can scarcely do rational analytical wood-work. When you come to give them the full amount of rational work which underlies the mastery of processes in any trade according to our standard of today, you are asking altogether too much. You will mislead those boys, and, above all — and here is the most objectionable point — you will compel those boys at a tender age to decide what they want to do in life; to choose their occupations at the age of twelve. Everybody knows that is an unnatural thing to do.

The other course, which is practically suggested, I think by Mr. Warner, is almost identical with that of Superintendent Higgins, of Worcester. He proposes to divide his school into two sections; one attends an ordinary high school, and the other the trade shop, in the forenoon; in the afternoon they change places. Mr. Warner said he would double the amount of shop-work; and, of course, that means to cut down something else. When a cup is full, you cannot put in any more without taking out something.

This half-time plan I do not favor. In the first place, there is the objection of cutting out the generous and necessary elements of a liberal training in the secondary school, all of which should be retained in fair proportion. If you are going to double the shop-work, you must cut out some of the academic work; and I think you will do it with a loss to the boy. The interests of the boy are what we are all after. We are not trying to meet any demand for boys who have been wronged and cheated and defeated in their plans for an education, but we have got to do what is best for the boys.

Then there is another thing: You and I know there is a limit to the time you can spend upon any school exercise profitably. When we started manual training, the shop-work covered two hours per day. The boys were fourteen and fifteen years of age. At the end of two hours, as a general proposition, the boys had about enough for once. It was time to stop. If we had gone on for two hours more, they would not have done double the amount of work. People reason that, if one hour is worth so much, three hours are worth three times as much; yet every teacher knows that is not so. Think of teaching geography to a class three hours, expecting to get six times as much done as you can do in thirty minutes! The first teacher of shop-work in the Massachusetts Institute of Technology arranged his program to give his students of the engineering course—I am not talking now of young boys, but of young men, of college grade—three hours at a lesson, and he said in his printed report that he had found in actual practice that the lesson was too long. Of course, they could work all day in the factory, but where would their minds have been? They would have been miles away; they would have played all over the athletic fields of New York, Boston, and Chicago. Their minds would have been absent while their fingers were busy. There is no education in that. When their minds leave their work and go out across the country, education stops. That shop teacher found that the education of those young men stopped before the three hours were up. Now Mr. Maxwell proposes to teach young boys a trade half a day at a time. That means four or five hours, and that is too much. It means an hour of education and three or four hours of absent-minded drudgery.

My solution of this problem is that we shall meet the demands of the trades in every legitimate way by multiplying all the while our manual-training schools; by making it possible for a larger and larger percentage of our young men to enter them. We are going to organize a manual-training high school in St. Louis very soon. The school I have charge of is not a public school. It has not been a free school except to a sprinkling of boys. But we shall have a manual-training high school there, and perhaps two of them; and we shall have a thousand boys, perhaps two thousand boys, in attendance. They are the boys that are going to form the sinews of our industrial system.

Mr. Richards just said that such boys work for a while in a trade, but as a general proposition they abandon the trade and do something better. That is the case with my boys. When I scan their record, I find very few of them working at trades, particularly those of the older classes. The recent ones we find at manual work scattered thru all occupations, but those who have been out several years have worked themselves out of their trades. Why? Because they could earn a great deal more at something else. There are lots of vacant places for them, and the world would not let them stay at the bench or drawing stand or lathe, as they were willing to do at first. It called them to work at something harder and which paid better. And they went on, as you and I would go, and as we would have them do. But a great many of them started at the trades. Now, what will be the effect when the number of graduates immensely increases? Why,

they will of necessity remain, because the demand for higher positions will be less strong; and they will fill the ordinary ranks, and they will stay there as long as the world will let them. It is a question of where they can be of most service to themselves. Therefore, I say, multiply, multiply, and multiply the opportunities for this immediate general training.

Here is another serious objection to any general attempt to teach boys trades. One-half the boys are not fit to be mechanics. They should do something else, and the boy is a fortunate boy that finds it out. Hence do not try to run them all into the same hopper, but give them a chance in the manual-training high school to find out what they are good for. I suppose half the parents who send their boys to my school have this controlling motive, viz., to find out what is in the boy, to find out what he is fit for. The boy, of course, has his fancy, which is all right. I respect him for it. It is natural and wholesome that he should have a fancy for what he wants to do in the world. But I do not rate that fancy as of any great importance. I remember when I was determined, if I ever got to be a man, that I would own a sawmill and run it. I could think of nothing more attractive for a future life than to lift the gate, turn on the water, and saw logs. I thought it was perfectly delightful. Well, I changed my mind and did something else. Now, that is what a boy has a right to do. The boy that was determined last year to be an electrical engineer this year has made up his mind to be a chemist. He has just been studying chemistry. He did not know anything about it last year. If he had known it, he would not have said anything about electrical engineering. Next year he will wish to be an architect. His instruction will carry him into the intricacies of framework, and he will begin to understand something about the strength of materials, and architecture as a fine art. He will end, perhaps, with being a lawyer, and a first-rate lawyer too. That is growth, and the parent or the teacher who calls such a boy fickle does him a great wrong. I think the parent should sympathize with every such change as that, because it is healthy growth. And so, I say, not half the boys are fit to be mechanics, and they should be allowed to become something else.

It is one of the great functions of the secondary school to cultivate the ability to choose correctly, and it must not be taken away; you must not substitute for it any cast-iron plan that forces the boy into one thing, willy nilly, and never allows him to get out.

You must give the boy a chance to grow out into some sort of manly excellence, to become familiar with what a man can do who has skill, and who has that skill added to intelligence. Our boys do not acquire any great amount of skill or expertness, so as to do work on time. We do not aim at it. We aim at doing work well and understanding it. When our pupils go out, they readily become swift and expert and all that, but it would be a mistake to try to do all that in school. We aim at intelligence, not speed and skill.

H. H. BELFIELD, director of Manual Training School, University of Chicago, Chicago, Ill.—This certainly is an age in which the world moves. I think fifteen or twenty years ago—yes, eight or ten years ago—it would have been impossible to have a meeting of this kind in connection with the National Educational Association. I was surprised with the paper read yesterday afternoon in the Art Department, in which a description was given of work done in the second grade of the public schools in Minneapolis, on the theory that the children should be taught in the school what society demands; that the children were taught to make baskets and in certain cases to sell them for money. If that is not trade education, what is it? Now, I believe very largely in what has been said by every speaker. I certainly must agree with those who say that manual-training schools should not be converted into trade schools. The manual-training school has its field, and the trade school has its field. It is true, however, that we do need mechanics in this country, but we are not going to make them in the manual-training school. I have graduated about eight hundred from the Chicago Manual Training School, three of whom are working at the bench. Now, we all know that a great majority of boys

have to leave the public schools at the age of twelve or thirteen. The great majority of them leave, we are told, on an average from about the fourth grade, or the fifth grade at the highest, and the large majority of those boys go to work at learning trades under every disadvantage, you may say, because a boy can be taught a trade in school to far greater advantage, with a far greater saving in time and everything else, than he can be taught in the shops.

I believe in what has been said in regard to the boy not being made to choose his vocation in life early. That is cruelty. It is a fact that the great majority of the boys who leave school and go into trades in this country do it at a very early period of their lives. Now, what are you going to do about it? I doubt very much the wisdom of attempting to add our instruction to an already overloaded curriculum of the lower grades of the public schools, notwithstanding the very interesting paper of yesterday-afternoon. I think we must have trade schools in this country. Our position as a manufacturing nation demands it. I believe trade schools are not to come in connection with the public schools; but, as the manual-training school started outside of the public-school system, so will the trade school. Whether it will leap over the boundary and get into the public schools or not, is a question. It seems to me that the trade schools must start as private enterprises. The great manufacturing establishments must establish their own trade schools and train boys for their own work. That must be done in the machinist's line, for instance, by the great manufacturers of machinery; and so on with every other trade. Twenty years ago the Baltimore & Ohio began an experiment of that kind.

That I may not seem to lack enthusiasm on the manual-training school question, let me add to what Dr. Woodward has said that there is no doubt of the ability of the manual-training school boy to earn a living at the very start. One trouble is that he does not stay in school long enough; he leaves at the end of the second year, because he can earn eight or ten or fifteen dollars a week. I have now on my desk more applications for boys than I can possibly fill. The man who says that the manual-training school boy cannot earn his own living is, in my judgment, a man who knows nothing about the manual-training school boy.

CHARLES B. GILBERT, superintendent of public schools, Rochester, N. Y.—I am interested in manual training as a department of public-school education, rather than in manual-training schools as such. And, from my point of view, the manual-training school represents rather too close a differentiation for a public school. My experience with public schools has led me to the belief that it is better to have manual training as a co-ordinate department of all high schools than to have a separate public manual-training high school. The longer I have observed, the more I am satisfied that, for the purpose of the public schools in turning out boys and girls with all the culture possible, so that they may be ready to do the best work in the world, the high schools which offer manual training to all the boys and girls fill the larger field. The manual-training high school as a public institution requires the boy who is just finishing the grammar school to choose for himself a definite course, and if he is not ready to elect manual training as his dominant subject, he can get none of its benefits, which, it seems to me, is most unfortunate. I think every boy and girl, even those going to classical colleges, should have the opportunity to take at least some of the manual-training work. If this subject has the great educational value which it is said to have, and which I believe it has, it should at least be offered to every boy and girl who takes a secondary course.

The danger to high ideals of manual training itself which exists in the public manual-training high school has been suggested by the discussion of the papers, which I was unfortunate enough to miss this afternoon. I refer to the tendency of manual-training high schools to run into trade schools. I take it that none of us, even those who have worked years in manual training, believe that for the average boy and girl the mechanical part of the work in the manual-training high school should dominate.

It should be a co-ordinate part of the work, but not the dominant part. But the danger is that that which is especially emphasized in the name of the school as manual training, and which is especially emphasized in the curriculum, shall be so prominent as to become dominant, and that the thoughts of the student shall be taken away from the other cultural studies of the course, as mathematics, history, literature, and language, and more and more the schools shall be turned into mechanical schools wholly. But if manual training were made a regular co-ordinate department of every high school; if there were full manual-training courses offered to those who want them, and limited courses to others, then there would be much less danger that the high ideals of manual training shall be lost in the utilitarian trade school. I may stand alone in this belief. I look at manual training as a school superintendent, interested in the subject as a part of an educational scheme, and not with the eyes of a specialist; but I believe firmly in the high school with manual training rather than in a manual-training high school.

GILBERT B. MORRISON, principal of Manual Training High School, Kansas City, Mo.—We have been trying in Kansas City for a number of years to work out the incorporation of manual training into the high school in such a way that it shall represent a high school which is normal to the present age in which we live. We have had in this country two types of schools. On the one hand, the old Latin type, as illustrated by the Boston Latin School, and, on the other hand, commencing about the same time, the apprentice school, and the trade school which represented very little scholarship. We have now come to a time when these extreme types are coming together, and a course of study is demanded so arranged as to possess all of these modern requirements for training of head and hand. We have in Kansas City a school in which we are endeavoring to maintain the standard in respect to scholarship while furnishing the student a full four-years' course in manual training and drawing. We have so far succeeded as to gain affiliation with the leading colleges and universities, and our students are received on the same terms as those of strictly academic high schools. But we are now, at the moment of our success, confronted with a danger—a danger which affects all of us alike, and against which we should strenuously guard ourselves. This danger comes, not from the taxpayers, but from the educators who have long dominated school policies in this country; who would, if they could, cause these high-grade schools to revert back to the trade-school idea.

If manual training in public education means anything, it means the incorporation of it into the course of study in such a way as to make it a purely educative force. If it is ever justified at all, it must be justified on educational grounds. And it is not too much to say that the experience of the best schools proves that it has been so justified.

We have also to meet the practical question of expense. The average taxpayer has always been willing to pay for that which is evidently useful. He is willing to pay for the utilities and necessities of life. We must make our high schools of such a character that the taxpayer can see the utility of them. The conventional type of high school is not considered useful or necessary by many people, and here is the origin of much of the criticism of higher education. In introducing manual training into our high schools we are simply making them so evidently useful to the community that the financial support of them will be voted to the fullest extent. Wherever manual-training schools exist they are regarded with special favor by the people, and especially so where it has been shown that the scholarship in them is not poorer than, but even superior to, that in the schools of purely academic aims.

MR. CHARLES F. WARNER, being called upon to close the discussion, spoke in part as follows: In opening the discussion Mr. Richards took issue on the matter of a definition of trade teaching or training. It seems to me that this is not to the point. There can be little, if any, difference of opinion as to what is essential and what is nonessential in the training for a particular trade, so far as that trade alone is concerned. If we were

content to advocate teaching trades merely, giving only that training which is essential to the particular trade taught and setting aside everything else, we should, indeed, aim at cultivating special skill rather than general knowledge and training. We should offer to the pupil instruction which would enable him to earn a living, which is no mean advantage, but we should withhold from him the broader education of the ideal school. This is the function of the genuine trade school, which may come in due time and find its proper place among American schools, meeting industrial needs here as similar schools abroad meet the needs of the communities which maintain them. But is that the real question under consideration? In discussing the relation of manual training to industrial education and the function of the technical high school in connection with preparation for the trades, it seems to me we are not called upon to consider the question of exclusive trade training, its nature, and the proper time and place for it. Manual training has already established itself as a broad principle in education and has brought all grades of school work under its influence. We have schools already established in which education along mechanical lines is emphasized to a certain extent. But their chief aim is a broad one, as it should be. They certainly have not the characteristics of trade schools. I agree with Mr. Richards that no effort should be made to convert them into mere trade schools. But is it not consistent and thoroly practicable for technical high schools to offer a training which shall amount to a real preparation for a certain limited number of trades, without sacrificing the broader educational aims of such schools? It seems to me that this is the question which is before us for discussion, and that there is a very practical answer to the question.

There is no time to review and explain the plan suggested for increasing the technical product of the schools referred to. But Dr. Woodward's criticism has led me to see that I failed to make my meaning clear on one or two points. In regard to increasing the amount of time given to mechanical practice, which is an essential part of the plan, there is really no inconsistency if the extra time is voluntarily taken by the students after the regular school hours. Those who are especially interested in this kind of work are always ready to double or treble, in this way, the ordinary allowance of time for the shops. By this means an immense gain for the technical side of the work may be secured without damage to the academic studies. This, of course, involves an elective system, and should apply only to those who, at the end of the first or second year, elect the special lines of shop-work which the school is able to offer. Probably not more than half of the students of a technical high school would choose to specialize in shop subjects; but why should half the school, or even a smaller fraction, be denied this advantage, if they really want it and are willing to increase their school hours in order to secure it?

I will refer to only one more point. Teaching the value of time I still think is of great importance and entirely consistent with the thoro technical training which I am advocating; indeed, it is an essential element of this training. I believe that economy of time and material can be successfully taught when we undertake mechanical training beyond the elementary stage usually found in manual-training schools. Of course, it counts for but little when there is no specializing in shop practice. But even here there may be an unconscious recognition of the principle which may bear fruit as soon as there is a chance.

On the whole, I see no inconsistency in an extension of our manual-training courses with a view to training for the trades. When we come to understand more thoroly what kind of industrial education is needed in this country, we shall find a way to give it the important place that it ought to have in our public-school system. In accomplishing this I believe we shall find our manual-training and technical high schools of great service.

DEPARTMENT OF ART EDUCATION

SECRETARY'S MINUTES

FIRST SESSION.—WEDNESDAY, JULY 10, 1901

A joint meeting of the Department of Art Education with the Department of Manual Training was held at 3 P. M. in the First Congregational Church.

SECOND SESSION.—THURSDAY, JULY 11

The department met at 3 P. M. in the First Congregational Church, the president, Miss Bonnie E. Snow, of Minneapolis, Minn., in the chair.

The meeting was opened with a vocal solo—"Break! Break! Break!" *Thayer*—by Miss Jennie M. Stoddard.

The secretary, Mr. Fred J. Orr, Atlanta, Ga., being absent, the president appointed Miss Mary A. Woodmansee, of Dayton, O., secretary *pro tempore*.

The following committees were then announced:

COMMITTEE ON RESOLUTIONS

Mrs. Franc R. Elliott, Salt Lake City, Utah.

Miss Roda Selleck, Indianapolis, Ind.

Mr. Ware, Dallas, Tex.

COMMITTEE ON NOMINATIONS

Miss Myra Jones, Detroit, Mich.

Mr. Moore, Birmingham, Ala.

Mr. Augustus S. Downing, New York, N. Y.

Miss Bonnie E. Snow, supervisor of drawing, public schools, Minneapolis, Minn., president of the department, gave a brief address.

Frederick W. Coburn, secretary of Art Students' League of New York city, read a paper on "The Economic Value of Art Education."

Miss Harriette Rice, supervisor of drawing in public schools, Providence, R. I., presented a paper on "Rhythm as an Art Principle," accompanying the reading of this paper by illustrations and rapid sketches on blackboard.

The next paper, on "The Study of Fine Art in American Colleges and Universities; Its Relation to the Study in Public Schools," was by Frank Foster Frederick, professor of art and design, State University of Illinois, Champaign.

An informal discussion of the various papers followed.

Langdon S. Thompson, of Jersey City, N. J., was then called upon for the report of the Committee on the Course of Study. The report not being ready, the committee was granted another year in which to complete it.

The Committee on Resolutions reported as follows:

RESOLUTIONS

In keeping with the trend of thought so generally expressed in the joint meeting of the Manual Training and Art Departments yesterday, and in the expressions of today, be it

Resolved, That, for economic and social reasons in this country, the efforts of manual-training teachers and art supervisors be directed toward bringing about more artistic handwork when taught in public schools.

Resolved, That appreciation be expressed to Miss Myra Jones, supervisor of drawing, and to Mr. J. H. Trybom, for the pleasure given in the reception of yesterday afternoon; to the president, Miss Snow, for the happy manner in which she has presided, and for the interest created in the collection of artistic handwork exhibited from the Minneapolis schools; to Mr. James E. Scripps, for the generous tender of his home and art collection for our pleasure and benefit; to Mr. Coburn, Miss Rice, and Mr. Frederick, for their helpful and suggestive papers; to the trustees of this beautiful building, for its use; to the musicians, Mr. Jarvis and Miss Stoddard, for their entertainment.

Respectfully submitted,

MRS. FRANC R. ELLIOTT,
Salt Lake City,
Chairman.

The Committee on Nominations reported the following named for officers:

For President—Miss Harriette Rice, Providence, R. I.

For Vice-President—Miss Roda Selleck, Indianapolis, Ind.

For Secretary—Miss Emily H. Miles, Denver, Colo.

MYRA JONES, *Chairman.*

Miss Rice, giving good reasons, declined the honor tendered her. A resolution to amend the committee's report was then offered, and Miss Myra Jones, of Detroit, Mich., was nominated. The nominees were then elected as officers of the department for the ensuing year.

The meeting was then adjourned.

MARY A. WOODMANSEE,
Acting Secretary.

PAPERS AND DISCUSSIONS

PRESIDENT'S ADDRESS

MISS BONNIE E. SNOW, SUPERVISOR OF DRAWING, PUBLIC SCHOOLS,
MINNEAPOLIS, MINN.

The annual recurrence of these sessions presents opportunity for review and prophecy. The educational situation, always interesting, seems to grow yearly in significance and scope. As we journey, like the hunter after truth, that vast white bird, with silver wings outstretched, sailing in the everlasting blue, over our mountains of reality, we are finding higher levels, and hence wider horizons, when we pause to look about us on occasions like these. Never before has the education of the races occupied so large a share of the attention of philosophers, philanthropists, prophets, and seers. We have our Carnegies and Rockefellers; our magnificent universities, libraries, museums, and galleries. Opportunities for the better enjoyment of life are constantly increasing. The individual man and his needs in the social activities of today are coming to form the basis of courses of study in schools and colleges, rather than the idea of knowledge for the sake of knowing. To make a man socially efficient, in the broadest and best sense, seems to be the truer educational development. The capacity to enjoy life is a true test of real development. Nowhere are these ideas manifested more strikingly than along

those lines of thought for which this department stands. The exhibitions of the past year show a marked tendency toward applied art, rather than the continuation of the more abstract or more purely æsthetic results formerly shown. I should not like to be classed as one who favors this practical tendency to the exclusion of exercises given purely for the development of the æsthetic idea; that which is ideal must always dominate; but I welcome any indication of more refinement and beauty in what may be called the ordinary affairs of life. In our schools we are thinking more of the effect upon children of our teaching of art. Does it affect them in their habits of life, in their homes, in their dress, in the occupation of their hours outside of school, in the work of their hands, in what may be called the attitude of their souls? Arts and crafts societies are more or less active in all of the larger cities and towns, and in many of the smaller ones. We hear of craftsmen's guilds, of the revival of weaving and of all kinds of handicraft, in circles not confined to schools or trades.

The joint meeting of the Art and Manual Training Departments of this National Educational Association, held in this room yesterday afternoon, is itself a sign of the times. The interest displayed of late on the part of professional artists as to what is being done in public schools to cultivate on the part of the people a better appreciation of beauty in its various manifestations is most hopeful. They no longer look upon us with contempt or indifference, these artists; they realize instead something of the greatness of the work we are trying to do. We have learned much from them, our friends, these critics! "Have you learned lessons only of those who admired you, and were tender with you, and stood aside for you? Have you not learned the great lessons from those who rejected you, and braced themselves against you, or who treated you with contempt, or disputed the passage with you?" But now they visit us with sympathy and co-operation, manifesting their desire to further our common cause by saying: "Come, let us reason together; for we, too, would be identified with the great movement to bring art to the people." We are all realizing more fully than ever before that art and the love of beauty are not things separate and apart from life; that art liveth not to itself alone; that art is not for a chosen few, but for all. So that the watchword for the new century may be, not art for art's sake, but art for humanity!

THE ECONOMIC VALUE OF ART EDUCATION

FREDERICK W. COBURN, SECRETARY OF ART STUDENTS' LEAGUE OF NEW YORK, AND MEMBER OF EDITORIAL STAFF OF THE "SCHOOL JOURNAL"

Developments in art are succeeding each other with rapidity. Bounds that were once set have been, in large measure, removed. As the national

life is modified by impulses from within and influences from without, changing ideals of taste and fitness inevitably express themselves in the deeds of the artist's hand. The course of artistic theory and practice in the United States is perceptibly following the trend of popular interest. The aspiration of the American people is for commercial supremacy, and thru the inductive power of the thinking and the saying of other men the artist's thought is perforce shunted into consideration of the economic side of his work. The most notable characteristic of American art at the beginning of this century is the freshly acquired conviction among professional artists that it is high time to demonstrate to the nation the practical value of art. So familiar has this thought become ; so numerous are the decorative and industrial enterprises with which artists have been identifying themselves in the last few years ; so popular are the movements for arts and crafts ; for the house beautiful and the beautified street ; for the preservation of natural loveliness and the demolition of acquired uglinesses—so many of these good things are there that no special pleading, no marshaling of statistics, is needed to prove to those who are at all in touch with the intellectual progress of the age that art and art education are subjects for commercial, and even financial, valuation. To present in detail the familiar facts regarding the dependence of industries upon art would be, in this place, a work of supererogation. Teachers and supervisors of art have not come to Detroit to be told that art is contributory to national wealth.

But how about Lewis Babcock ?

In front of his house—his "home" the Benham *Sentinel* would prefer to call it—stands that cast-iron deer which Babcock regards as "a kind of ornamental thing." What does Babcock know of art and its economic value ?

Yet the education of Babcock and his kind is one of the many tasks imposing itself with crushing weight upon the single-handed supervisor at Benham. The man has got to be taught better. It is a cardinal mistake to suppose that a movement can be effectively promoted thru children alone. An educational campaign to be most successful must be waged all along the line. We shall have gained a great point at Benham when we have got Lewis Babcock to drive the cast-iron deer from his doorway. How are we going to do it ?

The importance of argument in the modern business world must have impressed itself upon every observer. Logic, once the poor sizar of the schools and the humble attendant of the clergyman or lawyer, has become the faithful partner of the man of affairs. Every proposition in a business deal is adjusted by display of arguments. Back and forth fly words winged with conviction. On the one side is the man with the money ; on the other, the man who wants the use of the money. Valid argument is the only tool that will force the safe. The promoter must be able to show

how a dollar spent will mean a dollar earned. He is the attacking party; the defense has to be battered down by the ram of argument.

There is suggestion for the art supervisor in this practice of the business office. Of this business is it not a part to be able to argue as well as to teach? Good ideas must be presented with insistence and iteration. The often agitated truths regarding the impact of art upon life need to be stated and restated in Benham with every scruple of weight we can lend to them. The creed must not disappear in the deed. Surely there is a basis of belief upon which the faith of each of us can be daily confirmed.

A practical question is: How are we to get the clearness and vigor of statement demanded by the situation in Benham? How avoid the stereotyped general phrases that for years have come from our lips until they are as formal as a bit of litany?

Broad answer to such simple questions would take us far afield. To each man is vouchsafed his own habit of thought and speech. It is often well, however, when we undertake to preach the value of art education, to narrow our discussion down to its value to a single individual.

Just what, after six years in the grammar school and four years in the high school, will a school child actually carry away? Will he have gained an appreciation of the masterpieces of art, abiding and free from affectation? Will he have learned almost instinctively to apply the cardinal principles of design to whatever he has to do? Will he in wage-earning capacity and in other respects be a more valuable member of society than he would have been without his training in art alone?

Such questions as these have to be put and answered specifically with reference to actual accomplishments. Not only what is aimed at, but what is really done, has to be brought before the community in every way possible. The scope and details of the program have to be made known in various ways to all that are willing to listen.

Into matters of detail, however, there is no opportunity to go in this paper. Yet one tendency of today is of such far-reaching importance, so deserving to be explained and expounded by every art teacher, that a few words of emphasis in this place may well be allowed.

We got into the habit some years ago of speaking of art and manual training as if they were distinct and naturally separate branches of instruction. Even today, closely leagued as is this department in many ways with the department of manual training, there are doubtless some among us who would prefer to speak of the manual supervisors as with us rather than of us.

Yet here is a question which may well be put. Is not the best thought of today away from differentiation of functions in elementary instruction in the manual arts? Are we not convinced that art education and manual training spring from the same parent stem; that with young children no difference should be made between the two? We see manual-training

teachers breaking away from the dry and formal manner they once cultivated and cherished. We find art teachers who are paying more and more attention to questions of constructive utility. Have we not reached the point where we may insist that the two branches are properly one, to be conjoined in the lower grades, to be differentiated in the upper grades—perhaps in the seventh and eighth—and in the high school? Admitting and asserting this oneness, we have immeasurably strengthened our case for a general recognition of the economic value of our work. With better front we can exact from school boards and from the public the support that is due to one of the most vital movements in modern education. Most of us have been thinking along this line. We want only to carry our thought to its logical conclusion.

To unite all the manual arts, the handicrafts, by a common aim, a common policy, is the task that lies before us, half-done and advancing to completion. The barriers erected by the theories of classificationists are being rapidly burned away in the white heat of practical experience. It is becoming increasingly evident that the pupil cannot profitably undertake to do things artistically in the art class and inartistically in the shop; that there is no sharp line of demarkation between the useful and the ornamental, between the free and the mechanical. Art may enter into the working drawing of a locomobile and be conspicuously absent from the academy picture. Not subject but motive determines artistic quality. The unthinking machine may be constrained to evolve beauty at the behest of man, the thinker.

We need, too, to remember that the phrase "manual training, manual art," is one to conjure with. Many people to whom painting and sketching signify merely a nice accomplishment for squirrel-headed young ladies are willing to concede something to industrial drawing. From this side is the approach to their interest and understanding. Thence, if from anywhere, must come the argument which shall convince them of the identical origin of all art processes in the central ganglion of æsthetic law. Divisions and subdivisions let us have where they are an aid to our own clear thinking, but let us not be bound by them. May not the art teacher insist that all manual work from the kindergarten thru the university be regarded as an art work subject to the fundamental laws of space-relationships? The ultimate aim of it all—paper-cutting, drawing, modeling, painting, shop-work, perspective, and the rest—is, or ought to be, the training of the imagination along lines of good taste. And people are beginning to recognize everywhere that imagination is one of the modern man's most valuable assets. The power to foresee the steps by which an object desired shall be reached, to discern the *imago* before the thing's self has put on corporeal form, is one of the firm conditions of notable success, equally essential to the artist and to the manufacturer, to the literary man and to the promoter of great enterprises.

Statistical arguments regarding the importance of art to industry should be part of our panoply. We need not fear that such argument has grown trite. There are whole sections of this country where it is only just beginning to be heard, whole classes of our population to which the thought is new. Art is the very life of our industries. We have lately seen great manufacturing concerns of New England, when their business was threatened by competition of states where labor is cheap and raw materials easily accessible, bend all their energies to enhancing the value of their product thru rendering it more delicate and beautiful. Their success in thus utilizing the skill and feeling of the artist is saving for them their share of the home market, and bettering their chances in the markets of the world. Textiles, shoes, and furniture — what is true of them is ultimately true of all our industries. All signs tend to show that civilization is getting tired of its own ugliness. The class of people is growing larger that believes in the cheapness of good things.

In the education of adults to an appreciation of the value of our work, there are two classes of men that we ought especially to cherish for the aid and comfort they can give us. These are the business-men and the professional artists. In all ages it has been the privilege of well-to-do men to be the patrons of art. Only in this age and in this country has the privilege been deputed away. American money-makers, with some notable exceptions, delegate the patronage of fine arts to their wives and daughters. Differentiation of employments has gone to the limit. The man buys stocks in the market with the help of his broker, in order that from his winnings his wife may buy colonial furniture with the aid of the antique man. Each takes pride in knowing nothing of the other's business. An agreeable arrangement, we might say for the sake of gallantry, but as a fact it works to the disadvantage of art and art education. It is throwing upon women the whole responsibility of appreciating and sympathizing with the efforts of the artist. How well they respond is evident from their attendance at exhibitions and from the attention given to art subjects in the programs of women's clubs. Yet the need of man's presence is felt. There has been a certain emasculation of art. It is important that the business-man be convinced both that art is something more serious than an agreeable but expensive foible of his wife's, and that the instruction in public schools is something more than a necessary concession to the spirit that animates the women's clubs. In the language of the day, it is up to us to show him that art education is a paying proposition. Our argument, tho it is winged to rise at its height to a consideration of the glories of Florence and Athens in the great days of old, will have always to take its flight from Spotless Town.

A great artist, Mr. George De Forest Brush, has said:

Where a person has the general desire of studying art, but does not know exactly what he is going to do, he will wisely in most cases spend a little time in an art school,

just to make up his mind. As for the education of young children in the public schools, I have often questioned if the effort is not altogether vain. From my own experience in teaching children I derived the impression that the task demands of the trained artist almost superhuman powers. And of this I am sure: I would rather receive into my classes in the art school a pupil who has never drawn a line than one who has learned to do the kind of thing I have seen at school exhibitions.

When leading artists thus express themselves, the need of cogent argument is apparent in bringing them to a true understanding of what is being aimed at, what done, in the schools. They stand aloof. Yet may we not fairly maintain that the time has come when every serious artist ought to consider himself called upon to help in the movement for popular art education, not to stand off, contemptuous of the efforts of others? Many whose names will readily occur to all of us have pressed forward to give of their time and thought to this work; but many more are ignorant, not only of its aims and accomplishments, but even of its existence. If they have heard anything of the art instruction in the public schools, they have heard simply that it is something far removed from art. Many an artist, narrow in his range of interests, will wonder what it is all about, what the use is of teaching drawing to every mother's son. Is not this a profession that is always overcrowded with men who cannot earn their living? Why put ideas into children's heads?

Against so parochial a view we must needs set two strong demurrers. The aim in public-school work is not, as we so often say, to teach those merely who will become artists or artisans, but that much larger class that will thru life passively appreciate the active efforts of other men to produce noble art.

And this, too, must be contended that, where talent is discerned in a school child, and he is sent to the art school to become painter or sculptor or illustrator or designer, his accession is a gain to the artistic fraternity; and that every artist in the country ought to be thankful for the talent that has been uncovered. Each strong young man or woman who enters a profession contributes to the welfare of its members. He takes no bread from the mouth of any man. There is no permanent wage fund to be divided among artists. It is not true that there are too many artists. You and I know American cities as large as Athens in the days of Phidias that cannot boast a single strong artist. Plenty of room there is for many artists, but for artists who can help to create a demand for the thing they produce; who can demonstrate practically the economic value of their vocation.

The artists ought to learn the story, to all of us familiar, of the development of the movement, starting from its inception under English auspices, tracing the influences upon it of the kindergarten thought, then of the nature-study methods, and finally of the conception of art as an affair of transpositions from the world of flux and flow to the world of stable space relations. It should be known to them that the leaders of

this effort at general art education are abreast of the age and keeping in touch with the best that has been thought and drawn. Their influence is making for appreciation and comprehension on the part of the public of those large truths of form and pattern for which the artists contend, many a one with the conviction that he is a David pitted without allies against the most gigantic Philistinism the world has known. Nothing can more materially enhance the dignity and seriousness of the artist's calling than the work of education that is going on in the schools, and the artist is the especial beneficiary of all moneys expended upon the teaching of art. This the artist ought to see, and 'as he is getting most of all men in the community, so he may be expected to give most. Nowhere has the school work reached perfection. Everywhere is there room for expert advice. Let us hope that the present supercilious attitude of many clever artists toward education may be replaced by a thoro belief in its value and a spirit of willingness to co-operate in it without disdain.

One more point in closing. The value that can be put into the work of art education is conditioned by the value to the community of the whole public-school system. As the esteem in which education is held is enhanced, so the opportunities of the art teacher are increased. Of this we may be sure: if the ambitious plans of some of the educational leaders of today for a complete reorganization of society around the schoolhouse as a social center shall come eventually to achievement, art will be the gainer in manifold ways. With the schoolhouse as the social center of its neighborhood, flocked to by young people and adults for amusement and instruction, the way will lie open to arouse a broad appreciation of art. The walls of the school center will be made interesting with the best that is available. Not only reproductions of the great masterpieces shall we see there, but in many an instance the owner of an original work of art will prefer that it hang upon schoolhouse walls rather than in the seclusion of a private house or the semi-seclusion of a museum. Something of the spirit that animated the wealthy men of Greece may be predicted—a feeling that it is a disgrace to enjoy exclusively a work of art that was intended for humanity. This country, thru its boundless wealth, has already come into possession of some of the greatest treasures of the world, and more are to follow. If the school-community plan is realized, most of these will, thru force of public opinion, be directly available for the adornment of the common schools.

With educational conditions rendered favorable; no ill-fed, ill-groomed children in the schools; no public apathy; no sleek indifference to the welfare of the schools; but rather a live interest, a civic pride, in the possibilities of education—under such circumstances the work of art instruction will more abundantly justify itself by its results than it now can hope to do. Then it will be cherished as one of the fundamentals

of the whole round of instruction. Properly correlated, upon no merely ancillary basis, with the other work of the schools, and including all the handicrafts, it will be held in highest esteem by educators; and, being adequately correlated, on the other side, with the great industries outside the school, it will have the respect and constant solicitude of the leaders of the state.

In that day no one will be found to raise the cry of "fad."

RHYTHM AS AN ART PRINCIPLE

MISS HARRIETTE RICE, DIRECTOR OF DRAWING IN THE PUBLIC SCHOOLS,
PROVIDENCE, R. I.

In claiming for the domain of visual art a principle which has hitherto been reckoned to belong chiefly to music and poetry, it may be well to defend the claim with its definition as given in the *Century Dictionary*, or with as much of that definition as may be compassed within reasonable limits of time and space.

Rhythm is defined as "flow, and, by development from this sense, uniform movement, perceptible as such, and accordingly divisible into measures."

Flow, uniform or measured movement, the movement that is perceptible to the ear in the regular repetition of sounds, is recognized by the eye in a regular repetition of shapes and forms, whether in simple spots, more complicated figures, or the stately architectural elements which we find in the beautiful temples of the Greeks.

Just as the primitive music shows a greater development of rhythm than of melody, so primitive ornament shows a great sense of the rhythm which comes thru regular repetition, tho it often lacks refinement and beauty of line.

The very limitations of primitive handicrafts aided the development of simple but rhythmic ornament which we may trace out for ourselves in weaving, basket-making, bead-work, and some of the finer needlework like the Mexican drawn linen, or the cross-stitch embroidery that is done by the Russian peasants.

Children have a natural fondness for rhythm. The drum is a favorite musical instrument with them. They like the repetition of sounds in the simple nursery rhymes like "Old Mother Hubbard," and they love to repeat these in a "sing-song" fashion, because in that way the rhythm is more marked, and they often sing their spelling lessons, to satisfy their love of rhythm, tho it may lack rhyme and reason. In the motion songs of the kindergarten the rhythm is emphasized by movement. Many children show an instinctive sense of rhythm in their arrangement of the material which is given them for occupation work at their desks, and it is

almost always apparent in their creative work with brush or 'pencil. Flowers growing in a row like a border or frieze are favorite arrangements with them, and their illustrative drawings of circus day parades show a spirit and movement like that which we see in that grand procession of the Parthenon frieze.

When movement is divided into more varied measures, there is an added element of beauty like that which makes dancing a more beautiful and pleasing movement than walking. So the regular gradations and variations of the size and shape of figures used in a design give added pleasure to the eye in its forward movement. If we analyze one of these more varied elements, we shall see that each has a rhythm of its own in its progress from small to large or from large to small.

Nature as well as art abounds in such examples of rhythm. The gradual diminution in size of a vine or a branch of leaves is rhythmic. Our knowledge of perspective, which teaches us to look for apparent variation in size caused by varying distances, should teach us also to see a beautiful rhythm of size in a flight of birds across the sky, a fishing fleet in the bay, skaters on a pond, or even in a row of telegraph poles or railroad sleepers.

The uninterrupted rhythm or flow of curves is exemplified in the famous "Hogarth's line of beauty." Curves which are beautiful in themselves may be so arranged as to have no uniformity of movement. It is only when we place them so that one emphasizes another, or continues it, that we produce rhythm, and apparently inharmonious elements may be rhythmically arranged.

Our landscape gardeners are giving us rhythm in the winding roads of our parks, and even in the curves of a railroad track we may find it. The smoke and steam rolling up from thousands of factory chimneys show rhythmic lines melting into each other as softly and as beautifully as do the clouds which cap the mountain peaks, or the gently waving fields of wheat on the western prairies. We find it in the branching of leaves and the setting of flowers as well as in every line of the body of man, bird, or beast. The most precious examples of the beauty of line which have been handed down to us by the Greeks are shown in their sculpture and ornament. Our painters of today are striving for that rhythmic line which is the great beauty of the work of the old masters. The rhythm of line in design has been brought out more beautifully in *l'art nouveau*, so called, than in any other recent phase of decorative design.

Rhythm depends not alone upon line and form, but upon tone and color as well. Gradation in size gives rhythm, and so also does gradation of tones and values. Considering values at first, independent of color, merely as light and dark, white would be the lightest and black the darkest. Midway between these two would be a gray in which white and

black are equally balanced. There is a certain relationship between these three, but the advance from one to the other is so rapid as to be abrupt. If we introduce intermediate tones of gray, so that the progression is more gradual, the rhythm is more pleasing and the eye follows easily the flow or movement from light to dark and from dark to light. The gradation of tone which runs from the heart of a rose to its outer petals is a beautiful rhythm of values. The softening effect of the atmosphere upon distant objects in the landscape makes for us continual rhythms, and so does the play of light and shade on the shining surface of silk or satin. The artist must continually study value as the effect of light and atmosphere, and his work is most pleasing when the values are most rhythmic.

The complete spectrum shows a most beautiful rhythmic flow of color. Any two unrelated colors, such as red and blue, may be brought into harmony by completing the movement from one to the other so as to give a rhythm of color. We need some of the intermediate steps or hues, which in this case would be the varying tones of purple and violet that we get in passing from red to blue. If we wish, we may produce the rhythm by moving from either one of these colors, away from the other instead of toward it, so carrying our blue into green, and leaving the red to contrast with it, or carrying the red back to orange, leaving the blue for contrast.

Balance of color both as to quality and value must be a great factor in any color harmony, but of this nothing can be adequately said within the limits of this paper.

In emphasizing the universality of rhythm as one great principle of art, there has been no thought of disregarding others equally important.

Art is not an accident. It has its basic principles, and tho a knowledge of these will not make one a painter of pictures any more than a knowledge of rhetoric will make him a writer of books, neither the painter nor the writer could do worthy work in violation of the laws of his art.

And, as one better enjoys fine literature for his knowledge of what constitutes good writing, so he will better appreciate and enjoy nature and art because of his understanding of what beauty is and how it may be consistently expressed.

There could be no adequate literary culture which laid its whole emphasis upon the original expression of ideas with no regard to the form of expression. There can be no adequate art instruction which is concerned wholly with free and spontaneous self-expression, regardless of the principles which underlie beauty and consistency and harmony in the form of expression.

We have passed beyond the stage of making our drawing a mere record of facts and experiences, and have reached the point of using it as a means of teaching art principles and their application to all the creative work that is done in the schoolroom. It is knowledge of art that we covet for the children of the people, and our school instruction must

henceforth give more prominence to the teaching of the fundamental laws of art, that each may discover for himself new and varied manifestations of their everlasting truth and beauty.

*THE STUDY OF FINE ART IN AMERICAN COLLEGES AND
UNIVERSITIES; ITS RELATION TO THE STUDY IN
PUBLIC SCHOOLS¹*

FRANK FOREST FREDERICK, PROFESSOR OF ART AND DESIGN,
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In view of the widespread interest in the fine arts—this truly remarkable development of art education—it will be interesting to learn what is being done in this line by the colleges and universities of America. How general is the study of fine art, and how, in the colleges and universities supporting art departments, does the work compare with that done in professional art schools? Is this work in art a continuation of the work of the public schools, as it is in other subjects, and what relation does it bear to the work in the public schools? Are the universities leaders in this movement? Have they guided thought along lines best suited to American needs, and set the standard in this educational movement as they have in so many others?

There are in the United States 422 institutions of learning laying claim to the title of college or university. Of these educational centers 159 have 200 students or less. Of the remaining 263 institutions, 39 have an attendance of over 1,000. It was learned from a circular letter sent to each of these schools, in April of last year, that of these 422 colleges and universities 47 offer courses in fine art.

As will be shown later, the idea of a course in fine art so varies in different institutions that courses in free-hand drawing, for example, offered by some as a study leading to a degree, are in many cases considered merely as a preparatory study, and in others not reported at all, so that these statistics cannot be considered as more than very close estimates. It should also be remembered that the very large registration of new students at the beginning of this school year would greatly increase the number reported, but it is not thought that the proportion of students studying fine art to those not doing so is changed. It will be seen that the number of colleges and universities offering courses in fine art includes 8 in addition to the 39 having an attendance of over one

¹On account of the length of Professor Frederick's paper only a part can be published. The omitted portions refer to the general interest now taken in art education, especially in the public schools; the development of the professional art teacher; and the growth of art schools.—EDITOR.

thousand. (The University of Wisconsin and the University of Chicago, alone of the larger schools, do not offer technical courses in fine art.) In these 47 schools are enrolled, in round numbers, 45,000 students, of whom 5,146 are taking courses in the fine arts. Of these 5,146 students, 3,940 are regularly matriculated, and 1,206 are special students who enter to take the courses in art alone.

If only a trifle over five thousand students are registered in fine-art courses, it would seem that only one student in nine is profiting by this instruction; but it should be remembered that among the forty-five thousand are many who have already taken the work in the earlier years of their college course. It is impossible to state the number exactly, but it is safe to say that fully one-third of the students now registered in American colleges and universities offering courses in fine art have, at one time or another in their course, come under the instruction and influence of a professor of fine art.

It will be seen from the above that the influence of an instructor of fine art, if he appreciates his position, is great and far-reaching. Of these instructors there are ninety-nine in the forty-seven institutions offering fine-art courses. A number devote but part of their time to actual art teaching. In several institutions the art instructor is also instructor of some other subject. The lecturer upon Greek art is commonly the professor of Greek, and instructors of civil engineering and architecture are frequently instructors of free-hand drawing as well. In some institutions professional artists devote a part of each week—from one-half to three days—to instruction. This is a common practice among the smaller colleges. Being unable to support a special instructor, they take advantage of the residence in the vicinity of some artist and secure his assistance. Probably forty instructors of fine art devote their whole time to teaching in our colleges and universities.

In professional art schools there is a marked uniformity in methods, courses, and standards. In the public schools, on account of the fact that the drawing-books and manuals of one publishing house are largely used in all parts of the country, and that the conditions existing in the grade schools are much the same the country over, and as a result of frequent meetings and conferences of the teachers of drawing, the art work shows a unity of purpose and similarity of aim leading to practically the same results. But in the colleges and universities there is the greatest diversity in aims and methods. Greek or mathematics or history is much the same in Yale or Berkeley as in Cornell or the University of Michigan; but in fine art there is the greatest difference imaginable in the position the subject holds in different institutions.

Before answering the questions propounded above, this variation in motive, not seen elsewhere in the world of education, should be considered, in an attempt to ascertain the exact status of art study in American

colleges and universities. These institutions of learning may be divided into two classes: first, universities in the old acceptance of the term, in which the faculties of arts and letters are strong, which keep alive the old academic learning, and which stand for knowledge for its own sake; second, universities in the new sense, which introduce science and engineering, and give their faculties equal prominence with the faculties of arts and letters.

It is the aim of students in the first class to know *about* fine art, and to know it systematically and fully, without thought of its immediate application. And it is the aim of these universities to encourage in the student this high form of thinking—this study of pure fine art, if we may use the term as in speaking of pure mathematics—as far removed as possible from the affairs of practical life. In entering upon the study of æsthetics, where the student attempts to discover the laws which underlie man's endeavor to express himself in the language of art, and inquires into the history of art—the origin, growth, and development of these endeavors—the student cannot approach the study of art in a practical or commercial frame of mind. The student does not, however, confine himself to theory alone. In order to follow the artist he is studying, or to understand the art of a period, he gains some practical knowledge of drawing, painting, and modeling; but he approaches this practical study in a frame of mind utterly incomprehensible to the art student. The graduated product of the art academy seems, while infinitely more skillful in handling his materials, very ignorant of his profession when compared with a university man who has taken the fine-art lectures at, for example, Princeton, Harvard, or Brown.

The aim of a student in the second class, in which the study of the practical side of art is the central idea, is to gain as wide a knowledge of the technical side of art as possible, that he may use it to aid him directly in his studies and to equip himself more fully for his professional career. Hence it is that the student of engineering or architecture or science in Cornell, Columbia, the Massachusetts Institute of Technology, or the University of Illinois, willingly devotes much of his time to the study of art, or to that branch of it known as drawing. So fully does he realize its importance to him that he submits to the most rigorous training, to long endeavor, to severe study against which the art student would rebel. Up to a certain point his work not only equals, but excels, that of the professional art student; for to his study of art the university student brings all the power of reasoning developed in his study of logic and mathematics; all the patience and self-control developed in the study of the languages; all the broadness of mind and understanding which the study of history has developed; and he comes to his hour of daily practice refreshed and invigorated, and with wits so sharpened that a little talent seems to bud and blossom like real genius.

To realize fully the status of the fine arts in our colleges and universities, it will be well to examine in detail the courses offered by some of the most widely known institutions. This will be of interest because it will show how varied are the points of view of those establishing and conducting the work, and will show the extent and thoroughness of instruction—surprising to most, and especially so to professional artists and persons acquainted only with the work of professional art schools, who are prone to believe that all amateur work is alike superficial.

Bryn Mawr, Princeton, the University of Chicago, the University of Missouri, the University of Maine, the University of Wisconsin, and Brown University give lectures upon the history of fine art and æsthetics, with little or no technical instruction. The aim of these courses is liberal culture in fine art. The attempt is made to lead students to an appreciation of the fine arts by means of lectures, largely illustrated by lantern slides, collections of photographs, casts, and, in some cases, by original examples of fine art. (Six one-hour lectures per week, requiring from one to two hours of outside study for each lecture, is the time usually devoted to this work.)

The courses offered by Brown University may be given as typical: (1) ancient art, chiefly Greek; (2) Roman and mediæval, including Byzantine; (3) Renaissance, chiefly Italian of fifteenth and sixteenth centuries; (4) art of seventeenth and eighteenth centuries; (5) art of the nineteenth century; (6) theory and criticism.

Wellesley, the University of Michigan, Harvard, and the University of Indiana, while giving great prominence to the lecture courses on fine arts, include technical courses for those who wish the work, following the laboratory method of instruction. Wellesley offers two courses each year, of one hour per week, of "studio practice" to supplement lecture courses on the history of architecture, painting, and sculpture. The University of Michigan has no organized art department, but offers lecture courses in Greek and Roman art and archæology, with technical courses which do not especially supplement the lecture courses, but give, as in the University of Indiana, elementary instruction in free-hand drawing, light and shade, and color.

Of all our universities and colleges Harvard comes the nearest to what may be called pure fine-art instruction of any American university. Having no technical or professional aim in view, the study is really cultural; and it is made so by a union of theory and practice. The following are Harvard's courses: (1) principles of delineation, color, and chiaroscuro; (2) principles of design in architecture, sculpture, and painting; (3) history of Greek art; (4) the fine art of the Middle Ages and the Renaissance; also an advanced course in classical archæology. This is made possible by the collections in the Fogg Art Museum and the Boston Museum of Fine Art. It may be said here that it is as impossible to

teach fine art without examples as to conduct a school of agriculture upon a desert island.

In the second class enumerated above—schools aiming primarily to give students a knowledge of fine art that it may be used in their everyday work—are some of the foremost colleges and universities. To this class belong, among others, the United States Military Academy, Columbia University, Brooklyn Polytechnic Institute, the University of Illinois, the Massachusetts Institute of Technology, the University of Pennsylvania, Leland Stanford Junior University, Cornell University, and Johns Hopkins University. In these institutions art departments have been established aiming “to stimulate and assist those who, while pursuing other courses of study, wish to devote a part of their time to art as a means of general culture, or as tributary to some of the *practical activities* of life.” They “afford students the opportunity to acquire such a knowledge of free-hand drawing, light and shade, and color as their chosen courses may require.”

In these schools the art departments are on the same footing as all other departments of instruction. They make no attempt to secure special students in art, and do not, except in one instance, graduate students. In them the attempt is made to counteract the prevailing belief that art study is for the specially gifted alone. In their studios will be found classes in modeling and painting, with no one entertaining the thought of becoming a sculptor or a painter—the professional spirit being as subordinate as in schools teaching pure fine art. The subject here is made entirely practical, and its application to other subjects is kept constantly in mind.

The Massachusetts Institute of Technology, Columbia, Cornell, and the University of Pennsylvania should be considered in a separate group; for, while courses in drawing are open to all students, they are planned primarily to apply to and especially assist students of architecture. In the Institute of Technology “the instruction in free-hand drawing includes an elementary course taken by all regular students, and more advanced work in the departments of architecture, biology, and geology.” For students of architecture the course extends thru four years, and includes the study of ornament and of the human figure from the cast and from life, and also modeling and the use of water-color. “Importance is attached to drawing from memory and to rapidity of execution.”

Columbia believes in the artistic side of architecture. Its drawing rooms resemble the studios of some finely equipped art academy, and, as in the best schools of architecture, the study of fine art continues thru the entire course.

Cornell, while aiming primarily to assist the architectural student, also offers very thoro courses in drawing to engineering students—considering problems in perspective never reached by the professional art student. Michigan, it may be said here, offers two courses in drawing wholly for engineering students.

The school giving the most thoro instruction in free-hand drawing is the United States Military Academy. "More fully than any other technical school in America, the Military Academy has eliminated professional art school ideals and methods. All of this has been thrown out as unsuited to the needs of a technical school and beyond the grasp of the general student who is not studying art." In this the Military Academy should be the model for all technical schools.¹ Mechanical and free-hand drawing is carried along together—a course in technical graphics, including field reconnaissance and sketching, theory of color, model-drawing, drawing from memory, and military landscape sketching.

At the Naval Academy, where one would expect as fully developed courses in drawing as at West Point, there is no instructor of free-hand drawing, and little or nothing is attempted except mechanical drawing.

The two most fully developed art departments in American universities, tho in each case a somewhat one-sided development, are those in Leland Stanford Junior University and the University of Illinois. The former opened its doors with an art department, as one of many departments of equal standing, in 1891. The latter, with perhaps the oldest art department that has maintained its original organization and kept to its original plan of being simply a department on an equal footing with other departments, first gave instruction in 1873.

The department in Leland Stanford Junior "aims to develop and direct the power of visual observation, and manual skill in connection therewith, for the purpose of increasing intellectual power to discriminate and æsthetic power to feel." Six courses are offered: (1) an elementary course extending thru the year (nine hours of actual drawing per week), in which "the attention is disciplined and brought under control;" (2) oil painting; "chiefly still-life, though, when the student's power warrants it, landscape or portrait study may be included;" (3) advanced drawing, a course devoted to life-work; (4) scientific perspective; (5) landscape; "chiefly outdoor work, but supplemented, during the colder weather, by study from drawings, photographs, and still-life, with special attention to the interpretative use of graphic materials;" (6) æsthetics; "the nature, use, and origin of the æsthetic faculty; principles of beauty deductively discovered through examination of beautiful things."

The twelve courses offered by the three instructors in the University of Illinois have much the same aim in view.

Washington University and the University of California have affiliated schools of art. These are professional art schools which give instruction to any especially gifted student who wishes to take courses in both schools, but they do not attempt, as regular art departments, to reach and influence all students in the university.

¹ See *Course of Topographical, Technical and Free-Hand Drawing at the United States Military Academy*, by COLONEL CHARLES W. LARNED, professor of drawing.

The University of California is the only example of a university of high standing discontinuing an art department after it had been established, as occurred at the end of the last university year. This is the more surprising when it is remembered that this university recently came into public notice as the greatest patron of the fine arts (in the form of architecture) in the world. The Mark Hopkins Institute of Art, situated in San Francisco, is now an affiliated college of the University of California, and ranks among the dozen best professional schools of the country, but only incidentally aids in the art education of the university students.

The St. Louis School of Fine Arts is the only example of a full-fledged professional art school, of the standing of the Art League or Art Institute, developing from a university department. In 1875 special students were admitted to the drawing department of Washington University, and in 1879 the School of Fine Arts was established. Students from the university, wishing advanced art instruction, are admitted to the school upon the same footing as regular art students, while art students able to pass the necessary examinations may take courses in modern languages, history, and literature in the undergraduate department of the university. The university also offers instruction in elementary drawing in courses separate from those of the art school.

In a class by itself is the Yale School of Fine Arts. This "is a thoroughly equipped professional school of art, art museum, and art department combined." As a department it is the most thoroly organized and equipped of any American university art department aiming to educate professional artists and at the same time aid in the artistic education of the general student body.

No professional art school grants a degree. The Massachusetts Normal Art School formerly did so, I believe, but discontinued the practice, feeling that it was conferring an empty honor. Several of the schools connected with the smaller colleges and universities grant the degree of M.A. or M.P.

Yale and Leland Stanford Junior are the only large and important institutions granting a degree in fine art. When the opportunity for study in the large professional school is compared with that in the school connected with a small college, the value of a degree from the latter, compared with a diploma or certificate from the former, is apparent.

There *are* schools having but one or two instructors, far removed from art centers and out of reach of art museums and art collections, which graduate masters of painting yearly. The degree of bachelor of fine arts is conferred by Yale University "upon students of marked ability, who, having fulfilled the requirements of a prescribed course of advanced studies in the several departments of instruction, shall produce an approved original composition in painting or sculpture, and a satisfactory thesis on some topic relating to the fine arts."

In Leland Stanford all work in the university is elective. A student may elect as much of any one study as he pleases. When the registrar's books show that he has 120 hours of university work to his credit, he is graduated from the art department with the degree of B.A. in drawing and painting.

Having considered at some length the courses in fine art offered by American colleges and universities, we must reach the following conclusions: first, the subject is generally offered; second, tho the work varies greatly, depending upon the character of the institution offering it, it is always serious and thoro.

As a result of the thoroness of art instruction in our colleges and universities, we find that the same work, apparently, is carried on in the university as in the public school, and we reach a third conclusion—that most universities are doing public-school work and giving technical instruction in a narrow field, and, from necessity, of a very elementary character.

Teachers of drawing in colleges and universities are almost unanimous in reporting that the public schools do not prepare students to do the drawing required of them in their university work, and in consequence elementary courses are offered to make good this deficiency. Hence we see the curious spectacle of universities offering courses properly belonging in the high or grammar schools.

From the point of view of the university teacher who wishes a leaf, a shell, or a piece of machinery accurately drawn, the public-school work seems extremely superficial, as he wishes a drawing of the particular thing in hand—not any leaf, shell, or machine.

The prevailing thought in public-school art work at present seems to be to lead the child to see the beauty in things and train him to express that beauty in a free and graceful manner that is beautiful in itself. This certainly cultivates the æsthetic nature of the child, and perhaps contributes more to his education than a course leading him to see and express the special character of individual things; but somewhere in the public-school course the ability to draw simple objects accurately and quickly should be acquired. When instruction with this in view is given, most of the technical courses now offered in our colleges and universities will be discontinued.

On account of this different point of view, the university cannot be said to continue, as in other subjects, the art work of the public schools. The way is open for some institution of advanced learning so to influence the work of its preparatory schools that certain standards in drawing shall be met to secure entrance. The plan of accrediting preparatory schools—that is, of admitting their graduates without further examination upon proof that the general instruction of the school meets the standard of the university entrance requirements—gives the opportunity for some college

or university to elevate the art instruction of its entire constituency and itself give work only of university grade.

The universities cannot be said to have played any part in the wonderful development of art study in the public schools. All great movements have come from educators outside the university. The University of Illinois has aided by holding, in connection with important meetings at the university, annual exhibitions of public-school art work ; but this is nothing compared to what might be done, and should be done at once, if the study in the public schools is to be developed from the experimental stage in which it now is and made preparatory to higher things in the university curriculum.

A number of colleges and universities not offering this work would gladly do so. Bowdoin, for example, has a fine art collection, with a full appreciation of its educational value, but no funds at its disposal for purposes of instruction. All of the newly established state universities of the West, not already having them, will establish art departments in the near future, and one of the most progressive universities is seemingly waiting only for sufficient funds to establish an art department that will eclipse all others.

Professor Huxley's wish would seem to be very nearly fulfilled in America. In his inaugural address as lord rector of Aberdeen he said :

But the man who is all morality and intellect, although he may be good and even great, is, after all, only half a man. . . . In the mass of mankind the æsthetic faculty, like the reasoning power and the moral sense, needs to be roused, directed, and cultivated, and I know not why the development of that side of his nature through which man has access to a perennial spring of ennobling pleasure should be omitted from any comprehensive scheme of university education. . . . I should like to see a professor of fine arts in every university, and instruction in some branch of this work made a part of the art's curriculum.

It would be interesting to picture a university art department of ten years hence and consider the courses in art study in the public schools leading to the university work.

DEPARTMENT OF MUSIC EDUCATION

SECRETARY'S MINUTES

FIRST SESSION.—WEDNESDAY, JULY 10, 1901

The session opened at 3 o'clock P. M., with the following musical program by members of the choir of the First Presbyterian Church:

Organ solo—"Pilgrims' Chorus," from *Tannhäuser*, Wagner—Mr. Depew.

"Springtide," Becker—Mrs. Emma Beyer.

"In Maytime," *Speakes*—Mrs. Winifred Scripps-Ellis.

A. J. Gantvoort, of Cincinnati, O., president of the department, gave a brief opening address.

It was moved and seconded that in the discussions the first speaker be limited to five minutes, all others to three minutes. Carried.

Charles Hauptert, superintendent of city schools, Wooster, O., read a paper on "Music Teachers in Their Relation to the Schools." The paper was discussed by Mr. Twitchell, Mrs. Gaston Boyd, N. Coe Stewart, N. L. Glover, P. C. Hayden, Sterrie A. Weaver, Miss Estelle Carpenter, and Herbert Griggs.

As the second speaker on the program was absent, the following questions were proposed for round-table discussion:

1. What shall guide us in the selection of songs for school use?
2. Shall the regular teacher or the supervisor control during the music lesson?
3. How can we increase the influence and value of this department?

These questions were discussed by C. W. Weeks, Mrs. Emma A. Thomas, Herbert Griggs, Mr. Hornbury, N. Coe Stewart, Walter Aiken, P. C. Hayden, Sterrie A. Weaver, Miss Estelle Carpenter, and C. H. Congdon.

The president appointed the following nominating committee:

P. C. Hayden. Mr. Maybee.
Miss Estelle Carpenter.

SECOND SESSION.—THURSDAY, JULY 11

The department met in the First Presbyterian Church at 3 P. M.

The session was opened with the following musical program by members of the choir of the First Presbyterian Church:

1. Organ solo—Offertory in D flat, *Salome*—Mr. Depew.
2. "How Many Hired Servants of My Father," from *The Prodigal Son*, Sullivan—Mr. Harold Jarvis.
3. Quartet—"God Be With You," *Heinrich*—the choir of the First Presbyterian Church.

Miss Nellie G. Pettigrew, of Piqua, O., read a paper on "Supervisors from the Regular Grade Teacher's Standpoint." Discussion by N. Coe Stewart, Walter Aiken, and Mr. Forsman followed.

Mr. Walter Aiken, of Cincinnati, O., read a paper on "Supervisors and Supervision." Those taking part in the discussion were: Herbert Griggs, N. Coe Stewart, Mr. Twitchell, Mr. Forsman, C. H. Congdon, and N. L. Glover.

Mr. N. Coe Stewart, of Cleveland, O., read a paper entitled "Give the Boys and Girls a Chance." Discussion followed.

The Committee on Resolutions, consisting of C. W. Weeks, S. H. Lightner, and J. D. Luce, reported as follows :

Resolved, That we express our thanks to Mrs. Emma A. Thomas, for courtesies extended and local assistance; to the choir of the First Presbyterian Church, for their musical entertainment; to the various speakers who prepared such excellent papers; and to the officers, for their work in making this meeting a success.

The resolutions were adopted.

The Committee on Nominations reported the following two tickets :

1. For *President*—Arnold J. Gantvoort, Cincinnati, O.
For *Vice-President*—Sterrie A. Weaver, Westfield, Mass.
For *Secretary*—Mrs. Gaston Boyd, Newton, Kan.
2. For *President*—Sterrie A. Weaver, Westfield, Mass.
For *Vice-President*—Mrs. Gaston Boyd, Newton, Kan.
For *Secretary*—Miss Estelle Carpenter, San Francisco, Cal.

The first-named ticket was elected.

Miss Carpenter moved that the *School Music Monthly* be made the organ for publishing the discussions at the meeting of this department. Carried.

The department then adjourned.

H. W. GRAY, *Secretary*.

PAPERS AND DISCUSSIONS

PRESIDENT'S ADDRESS

ARNOLD J. GANTVOORT, ASSISTANT DIRECTOR, COLLEGE OF MUSIC,
CINCINNATI, O.

While this is a time of specialization in all professions and all branches of learning, nevertheless no one denies that a thoro education, broad and deep, should form the foundation for such special study as may be followed by anyone. Furthermore, after one has entered the profession of his choice, contact with men of the same profession and of affiliated professions is absolutely a necessity, if one desires further growth. If one, however, be satisfied to simply become a fossil, attendance at such meetings as this is unnecessary. The greatest need of the music teacher of today is an all-around education.

This morning I had the pleasure of an introduction by a music teacher to another gentleman. My first query was naturally: "Is this also a music teacher?" And the reply came very promptly from the gentleman introducing us: "No, this is an all-around man." The "all-around" man mentioned knew considerable about music, altho he was not a music teacher. But it is safe to say that if such an all-around man, with but ordinary musical ability, were to enter the profession of music teaching, he would soon outstrip many who are far more capable musically, but are developed only on one side and are not all-around men.

That such men have existed from time immemorial we find even in the Bible, where one of the inspired writers, in speaking of a certain person, said: "Ephraim is an unturned cake."

Some two weeks ago I had the honor to deliver an address before the Indiana Music Teachers' Association at Terre Haute, on the necessity of broader culture for musicians. I have noticed repeatedly in other programs of other music teachers' associations that similar topics are being constantly discussed, showing that the profession is awakening to this fact. Who does not know the teacher whose pupil, after having studied with him but a few years, takes his own pupils away from him, simply because the teacher has permitted himself to fossilize and has not kept pace with his profession, and instead of growing has shrunk?

A glance at the program will bring to your notice the fact of two addresses that will help us as supervisors "to see ourselves as others see us;" one from the standpoint of the superintendent, and one from the standpoint of the regular grade teacher. These addresses should be of help to us, because the many of us are so wrapped up in our own branch of school work that we lose sight of our appearance in the eyes of those with whom we are associated. I hope, therefore, that these papers will cause us to look upon ourselves somewhat "as others see us."

MUSIC TEACHERS IN THEIR RELATION TO THE SCHOOLS

CHARLES HAUPERT, SUPERINTENDENT OF CITY SCHOOLS, WOOSTER, O.

In the discussion before us the subject will be considered from an administrative point of view. As a superintendent, I shall speak very briefly, in a direct and practical manner, to supervisors and teachers of music in the public schools.

At the outset we may assume the paramount educational value of music; its silent but positive force in training for discipline, patriotism, morals, and religion; and its assured place in the elementary curriculum of the American school. It is well also to keep constantly in mind the limitations under which the instruction in this department must be carried on. Music in the popular mind does not yet rank in importance with arithmetic, spelling, and history. As the majority of our voters are more or less indifferent to musical instruction, much poor work is tolerated from year to year. The instructor in music naturally cannot be in as close touch with the individual pupils as the regular teacher. Large numbers are usually taught together, and the special teacher, as a rule, cannot direct personally the lesson preparation and thoroly test this preparation. Certain physical qualifications in pupils must be reckoned with. In the higher grades other school interests and duties make exacting demands upon the pupil.

The music question is a very serious problem with teachers, superintendents, and boards of education. Fortunate is the community that has the right person in charge of this important department. What are his various relations to the school?

1. He should have a broad general culture outside of his immediate specialty.

This has been the plea of leaders in music for many years. The Ohio State Board of School Examiners requires all applicants for special life certificates to teach music to pass a satisfactory examination in physiology, psychology, and the science, history, and art of education. The practice of granting special certificates simply upon an examination in this branch, and possibly physiology, cannot be defended upon sound principles of school economy. Special teachers, no less than regular instructors, should not only understand the underlying principles of education, but actually know how things in general are really done in a good school. The leaders among special teachers must ultimately lead their followers to correlate their work with the general spirit and plans of the school.

2. He should bring to his work special training and adaptation.

In addition to knowing thoroly the subject to be taught, every teacher must have a certain aptitude for placing himself in right relations to his colleagues and his pupils. He must have teaching ability, professional skill, the teacher's spirit, the power of getting hold of pupils and interesting them in the subject taught.

There are two general classes of incompetents: those who hold their positions by means of sympathy and pulls, and those who, in spite of character and learning, are failures as teachers. The cause of music has suffered much from the indifference often shown in the manner of appointing instructors. A diploma, the office of chorister or organist, leadership in an orchestra, even rare ability in singing—none of these, in themselves, are sufficient to warrant so important an appointment. The teaching of music is one of the noblest and the highest of the professions.

The incompetent instructor—no matter what his department—never fails to find a plausible explanation for his shortcomings. He may allege an unappreciative public, a weak or unprofessional predecessor, or an indifferent superintendent or corps of teachers. Not infrequently does he appeal to that last resort of the incompetent: he simply places the blame upon the helpless, innocent children intrusted to his direction.

A real master in his work does not shift any responsibility from himself. He adheres to a high ideal with the firm hope of ultimately attaining to it. He trains himself to look at facts as they are and to understand the conditions under which he must work. He will arouse a constantly growing interest in his department by rational methods of study skillfully

applied. He manifests a genuine appreciation of all the learner's efforts. He will always be enthusiastic and place himself in sympathetic relations with his pupils. According to an eminent author: "The child as naturally responds to sympathy as does the plant to moisture and sunshine. The greatest direct educative force that can be brought to bear upon the child is sympathy. . . . Sympathy is the mother of patience and the inventor of devices." By professional skill the teacher combines his enthusiasm for his subject with his love for the child, and thus becomes a veritable prince in the schoolroom. We find these things taught in the life and writings of all the great teachers in educational history.

3. The music teacher should stand in relation to the school as skillful and efficient in the control and management of pupils.

Numerous delicate but practical questions are constantly arising during the music period. Should the instructor in music, any more than the regular teacher, be absent from teachers' meetings, when matters of method and discipline are under consideration? Who should be held responsible for the discipline during the music period? What is to be done with the pupil who has no voice for singing? When the mother desires her daughter to sing soprano, but the teacher in music positively insists upon the child's singing alto, and no agreement can be reached between the mother and the teacher, what is the proper course? How can we best deal with a teacher who will not receive a suggestion under any circumstances from fellow-teacher, principal, or superintendent? What can be done when an instructor in music cannot, without the aid of some regular teacher, control a class at a rehearsal for an entertainment or for commencement exercises? What should be done when the music teacher habitually makes mischievous insinuations against either pupils or the teacher? In short, under whose direction does he work?

These are simply a few of the numerous practical administrative problems constantly coming up. If all unnecessary friction is to be avoided, if a spirit of mutual helpfulness is to prevail between regular and special teachers, if boys and girls are to enjoy the music period and thoroly appreciate the value of genuine culture in this inspiring art, the teacher in this specialty must be a student and lover of children; he must cultivate faith in human nature and the possibilities of childhood; he must understand and skillfully apply the underlying principles of school discipline. Those who desire to control skillfully and efficiently should keep in mind a number of practical maxims like the following:

1. The habit of self-control under all circumstances is absolutely necessary in acquiring an easy and firm control of others.

2. Cultivate a cheerful and pleasant countenance. "This is a perpetual picture which his pupils study as unconsciously as he exhibits it." The face is the mirror of the heart.

3. "Praise judiciously, censure sparingly." A teacher may easily become a habitual fault-finder and thus a failure in dealing with children.

4. Beware of pedantry, egotism, threats, ridicule, and sarcasm. These never cease to be a prolific source of trouble.

5. Never nag nor antagonize a pupil. The teacher of music should guard himself strongly on this point.

6. Never in any manner invite misconduct or insubordination. Be courteous always.

7. Never permit any pupil to see that he can annoy you.

8. *Never, never scold.* It becomes an abominable habit; it does no good; it always harms. Scolding arouses resentment; it is a confession of ill temper and irritability; it is a confession of weakness and defeat; it is an open confession of willingness to pain others for the sake of relieving ourselves; it is generally unfair and unjust; it may contain much downright falsehood and slander.

9. If you desire an attentive school, be quiet and orderly yourself. Do not talk too much. Talking too much is the besetting sin of most teachers.

10. Commands, or rather requests, should be very carefully considered before they are made. Some things settle themselves.

11. Blame should never be general. Never blame an entire class or school for what a few have done.

12. As far as possible, aim to give reproof privately.

13. Cultivate the ability of holding "the pupil right up, day by day, to uniform conduct and effort."

14. Under all circumstances avoid all school gossip.

15. Put yourself in the place of your pupil; trust him; sympathize with him.

16. Always be practical; use common-sense.

These are, indeed, old, tried, and well-known maxims, but no teachers, old or young, regular or special, can safely ignore them.

In every department of education there is a rapidly growing demand for better teaching that will stand the test of the science and art of education. It has become harder to impose poor teaching upon the people. In the college, the high school,—in fact, in every school—there is a question ever present with the conscientious teacher: Can you teach with efficiency?

After all that may be said on the relation of the music teacher to the schools, the question resolves itself into a question of efficient teaching. A broad general culture, professional skill, and the gift of control and wise management, all culminate in efficient professional service. He who is master of the situation will rank well in the community, the pupils will respect him and love their work with him, the teachers will heartily second all his efforts, the board of education will be inclined to be more liberal in his support, and the cause of music in the public schools will keep on moving upward.

THE SUPERVISOR FROM THE STANDPOINT OF THE REGULAR GRADE TEACHER

MISS NELLIE G. PETTIGREW, PIQUA, O.

This is an age of specialization in all lines of work, industrial, professional, and educational. Specialization means supervision, and the combination of these two secures greater efficiency, economy of time and effort, and better results.

From the standpoint of the regular grade teacher, how is the supervisor to be considered? Is he a help or a hindrance? What should be his qualifications? what, his relations to the pupils? to the teachers? to the school system as a whole?

That we may be clearly understood in this discussion we shall refer to the supervisor as belonging to the *genus* man, and the grade teacher as a representative of the *genus* woman.

Is he a help or a hindrance? That depends largely upon himself and his qualifications. Too many supervisors are artists, but not artisans. They possess the requisite knowledge, but they do not know how to utilize and impart that knowledge. Others think because they possess a modicum of musical talent or teaching power that they are fully qualified for this work, and look upon any special training as superfluous. "I can get all the preparation I need, if I spend three days in this summer school," said one who was about to take charge of music in a neighboring town, and he was quite indignant when the principal of that school refused him a certificate.

He who said in derision after rather a stormy experience, "I find that to be a supervisor one must not only be a musician, but also a pedagog," uttered a very important truth. Mere knowledge never made a teacher. Yet a thoro knowledge of his subject is the first qualification of the teacher; and not of his subject alone, but of many related subjects. How can he teach patriotic songs without knowing history? how the gems of literature in song without an ability to appreciate the beauty of the thought expressed? how the songs of heart language without heart culture? But, you say, this is not music, and it is music that I am to teach. *It is music.* The teacher who gives a patriotic song to a class and does not so teach it as to inspire and quicken feelings of patriotism is a failure. The jewel of thought in its equally beautiful setting of sound should be so placed before the pupil that both alike shall be understood and appreciated. The rhythm of the heart-beat is the only true rhythm by which the songs of emotion and feeling should be measured. And it is only the teacher whose own soul is full of patriotic fire, of true appreciation, and of genuine heart culture who can properly teach it. Add to these elements the teaching power, the ability to impart knowledge, to arouse thought, to quicken mental activity, and you have a supervisor who is not merely a help to the regular teacher, but an inspiration as well.

"Will Mr. S. give our music lesson today?" queried a pupil. "Yes," was the teacher's reply. "I am sorry; I wish he wouldn't come," answered the boy, and the teacher could but silently echo the wish. She knew that cross words, the unjust fault-finding, and the badly taught lesson would leave the class unfit for its other tasks and make her day's work more difficult.

"I am always glad when it is Mr. A.'s day for a music lesson," said a teacher in referring to the supervisor in her town. "He always leaves my pupils so wide-awake and full of enthusiasm that they do good work in everything else for the rest of the day." In these two types you will find the answer to the question: "Is he a help or a hindrance?"

The school exists for the child. It is his need which gives it the right to be. Too often this fact is overlooked by the supervisor, who seems to regard the pupils as a sort of set of ten-pins to be bowled over or thrown about at his will. He has no regard for the rights or interests of the child; knows very little of his needs or mental abilities, and has no sympathy with him. We talk about descending to the level of the child. We are mistaken. We ascend to that level. "A little child shall lead them," said the Great Teacher. It is only when we can rid our thoughts of their gross trappings, and express ourselves in language such as the child mind can grasp, that we reach the real heights of clear thinking and lucid reasoning.

The supervisor should make a careful study of the child, and his insight into its nature should be quickened and strengthened by daily observation. The truest test of his success is the work in the primary grades. He may be reasonably successful in his high-school work, but if he is not able to adapt himself and his methods to the younger pupils, the foundations of his work will be weak and the superstructure will be defective.

Pupils in all grades look upon the grade teacher as their leader; as the one to whom they can go when in difficulty; from whom they will receive kindness, courtesy, sympathy, instruction, and help. What is true of the regular teacher should be true of the supervisor. He should have a kind word and a pleasant greeting for all, and that genuineness of heart and character which wins the love of the little children and commands the respect of the older pupils.

Now, as to the main point of this subject—the supervisor and the regular grade teacher. Let us picture him in the ideal and measure the real by it.

Our ideal supervisor possesses the necessary mental qualifications which we have enumerated, and his relations to the pupils measure up to our standard. He is first of all a gentleman, neat in dress, free from disgusting habits, courteous in demeanor. He has a pleasant word for all, but never gossips or descends to frivolity. He does not allow his personal likes and dislikes to bias him in his estimate of a teacher's work. He is an adept in the art of silence. He never flatters. He gives a judicious amount of just praise or criticism to the teacher herself, but does not talk of her work to the other teachers or to outsiders. He is truthful, and his word can be relied upon. He comes to his lessons *promptly*. He knows that school time is limited and valuable, therefore

there are no lost moments charged to his account, and no teacher is ever vexed by tiresome delays.

He enters the schoolroom with quiet dignity, greets all kindly, and goes to work at once. He knows what he wants to do, and does it. He not only knows the subject of his lesson, but the object as well. He reviews rapidly the work which the teacher has done, notes any defects or omissions, remedies the one, supplies the other; takes up the new work and teaches it; touches as many of the salient points as possible, and questions carefully to see if he has made them clear to the pupils. He prefers always to introduce a new subject himself, and, as far as practicable, to begin all the new work. He announces the songs and exercises definitely; states plainly what he wishes done, then requires—rather say directs—the pupils to do it; for with such teaching there is no requirement necessary. He doesn't do the work for the pupils, but gives it to them in such a way that they can do it for themselves. He doesn't fill their heads with unnecessary theoretical knowledge, simply because he happens to know a little theory himself; but he gives them just such points as are needed for a clear understanding of what they are doing. On the other hand, he does not require them to do what they do not understand. He doesn't scold, ridicule, or indulge in harsh criticism. He teaches in such a way as to arouse interest, and thereby secures attention. He has no occasion to exercise any apparent discipline. The pupils are too busy to be disorderly. He puts tact, knowledge, enthusiasm, and purpose into his lesson. The pupils are aroused mentally, and all the finer elements of their being are quickened by the power of the music and its teacher.

This ideal supervisor not only studies his work and the needs of the pupils, but also the individual teacher. He has his work carefully planned, its main points outlined, and its purpose well defined; and he seeks to acquaint the teacher with his methods. In the larger cities this must be done thru grade meetings; in smaller places much can be done by a few minutes' instruction at the close of the lesson. Every real teacher is anxious to know how to do, intelligently and efficiently, the work required of her, and the supervisor who can thus place his work before her may be assured of her co-operation and interest. The general plan must be thoroly understood by her, the points to be emphasized well defined. Then she will not seek simply to "go over" the lesson and imitate the teaching of the supervisor, but will supplement the knowledge imparted by her own ingenuity and teaching skill, and work for results. Many of the difficulties of the supervisor's work would be eliminated if the grade teacher simply knew what was expected of her.

The work of the supervisor must be adapted to the individual teacher. One can teach the songs, but fails on the theory, or *vice versa*. A judicious adaptation of teaching and requirements will overcome these difficulties and secure uniformity of results.

The supervisor also meets the unmusical grade teacher who says: "I can't sing, I know nothing of music." She must have her ignorance transformed into knowledge, and her "I can't" converted into an "I will." And just here may we say that there is no teacher, whether she sings or not, but who can, by study and application, learn music and teach it successfully in her grade. She could not teach arithmetic until she had spent several years in studying it. Let her try the same method with the music, and she will find her success in exact ratio to her efforts. All this requires tact, patience, and judgment on the part of the supervisor, an untiring vigilance, and an ever-increasing interest in his work.

But you say: "All this is ideal." Yes. Yet it is only as we make our ideals realities that we grow in our work. It is the teacher with high ideals who develops into the ideal teacher. You say: "It throws all the responsibility on the supervisor." Yes and no. The commander of an army is the soldiers' ideal, altho he may be hampered by human frailties and weaknesses. But just in so far as he seeks to realize the ideals of his position is he successful. On him falls all the responsibility of the conduct of the battle; yes, but every soldier in the ranks is sharing that responsibility, and from the least to the greatest all bear their part.

The supervisor must be a leader. He must have conscious and recognized ability as such. Leadership implies better acquaintance with the work required of the teachers than they possess themselves. This acquaintance is the result of knowledge *and* experience, past and present. For the ideal supervisor as well as the successful teacher is the one who is constantly growing, mentally and professionally.

In the schools of any city, next in importance to the position of the superintendent is that of the supervisor of music, and he should be a man worthy of his office. He has an opportunity to know the work of all the teachers, to note the excellencies and defects of all; and, if he is a man of careful discernment, he will profit much by his observations. Because of this he needs all the more to know much of all the subjects, as well as his own. He should not only know them superficially, but should be able to teach them if opportunity offers. This will give him a keener insight into the abilities of the pupils and a truer appreciation of their needs.

If he be a student of mathematics, he will be able to reach some thru the arithmetic of music. He can be of great assistance to the science teacher if he possess a knowledge of physics and can talk to the pupils upon the subject of sound. He thereby not only awakens and strengthens the interest in the subject mentioned, but gives new light upon the music. If he can go with the history class into the records of the past, and show them the origin and purpose of the songs of the nations, which have won battles and overthrown empires, or lead them to the firesides of some of the greatest authors who have thought their best thoughts while listening

to music; or if he can direct them to *listen* to Moore, Shelley, Cowper, Keats, Bulwer, Shakespeare, and many others, as they chant in the magic cadence of poetry the charms and praises of music—if he can do this, he has not only broadened and enriched his own mental being, but has put into the heads and hearts of his pupils and teachers the elements of that higher and better culture which, even while they remain in this world, discovers to them both earth and heaven.

The supervisor needs to see his special subject in its true relation to the school system as a whole; to view it in perspective, if you please; not to give it undue importance over other things. He must see its bearings upon the other subjects taught and their relations to it. He must know its limitations. He must get that view which substitutes the satisfaction of being a part of a process for the satisfaction of completing things. He who can so see his own work in true relations to the whole gets that spirit of healthy optimism which comes of looking at the whole and working for distant ends. Such a supervisor is sure to be successful.

The optimist is the man of ideals. The man of ideals is the man who is today lifting the world. It was such a man who wrote for us:

Build thee more stately mansions, O my soul,
As the swift seasons roll!
Leave thy low-vaulted past!
Let each new temple, nobler than the last,
Shut thee from heaven with a dome more vast,
Till thou at length art free,
Leaving thine outgrown shell by life's unresting sea!

SUPERVISORS AND SUPERVISION

WALTER H. AIKEN, SUPERINTENDENT OF MUSIC, CITY SCHOOLS,
CINCINNATI, O.

The keynote for the twentieth-century music supervisor was sounded by Robert Browning sixty-five years ago, when as a boy, in that masterly poem of "Paracelsus," he wrote:

Truth is within ourselves, it takes no rise
From outward things, whate'er you may believe.
There is an inmost centre in us all,
Where truth abides in fulness,
. And to know
Rather consists in opening out a way
Whence the imprisoned splendour may escape,
Than in effecting entry for a light
Supposed to be without. Watch narrowly
The demonstration of a truth, its birth,
And you trace back the influence to its spring
And source within us, where broods a radiance vast
To be elicited ray by ray, as chance shall favour.

It is in consonance with these thoughts that we plan our work, and strive to cultivate in the child a spiritual power and a power for self-activity—powers that shall be for the child's service thru life. It is the teacher who deals with the spiritual nature of the child.

We would question the authority of a supervisor who would plan for each day of the week, and prescribe just when and how each point was to be presented to the child. Were such a procedure adopted, teachers would become similar to mechanics working at the bidding of a foreman. The skill of the master-instructor would seem to lie more in leading teachers to grow into method than in prescribing methods for them.

It is held that no supervisor ought to be allowed to direct in the matter of the musical education of a child, unless he can first intelligently plan and execute a consistent course of study in that subject for all of the grades. This should be considered the test of fitness. If to this fitness in his equipment be added breadth—the power to see largely, to think largely, to judge largely—there must arise a habit of largeness, and with it the power to hold to the highest, unmoved by the submerging waves of a thousand lesser duties.

In connection with this skill of planning and executing a course of musical study, we make two declarations for the thoughtful supervisor to consider: first, what we have learned our pupils may learn; second, it may be better that they should not learn all that we have learned, and so have room for their own independent acquisitions.

A great writer has said that society everywhere is in conspiracy against the manhood of its members; that it is a joint-stock company which agrees to the better securing of his bread to each shareholder at the price of a surrender of the liberty and culture of the eater; that, in short, the individuality is a fault, conformity a virtue. In musical art, it has been well said that "conformity is the parent of inefficiency." "To know what you prefer," as Stevenson says, "instead of humbly saying amen to what the world says you ought to prefer, is to have kept your soul alive."

Supervisors! are we training our boys and girls into conformity; cramming their youthful brains with information which they cannot use? It behooves us then to sift the knowledge that we impart to the child, and consider very carefully just how much and what to present. We thus avoid the danger of attaching a fictitious value to what we have learned, and that perhaps with considerable effort. Upon such material let us turn the fiercest searchlight, learning to criticise others keenly and ourselves severely, even savagely.

In our duties as supervisors are we taking cognizance of the child's natural endowments and providing for his fullest development, thus cultivating "the power to do"—creating self-activity? Are we training the eye, the ear, the vocal organs, the hands; teaching music thru tone-relationship and not simply teaching notes? Are we seeing that every

lesson has a point to it? Are we making clear to the pupils what they are to learn and then showing them how to learn it? Are we putting ourselves in the child's place, and not presenting the same subject in the same way with all children, nor having a set plan for removing all difficulties? Those of you who have followed the educational literature of the past five years, and especially our musical literature, have found it abounding in plans and devices of all sorts and of varying merit—sight-singing-from-Wagner-while-you-wait schemes and other “no difficulty” methods. Some of these methods are very ingenious and attractive, and it is feared that many teachers are using them without an inquiry respecting the ends to be reached or the principles on which they are based. A device is often approved because it “works well,” that is, it interests the pupil and is readily manipulated. It is surprising that so many useless devices are used and commended on the erroneous test of availability. While it is conceded that some of these devices “work well” and interest pupils, we must not forget that interest is not the end of school training; it is only a necessary condition—a means to the end. It is easy to deceive the American public by showy results with modulators and other appliances; but real sight-singing in time and tune combined, and in parts sung from a printed page, is far in advance of modulator work. The search of the twentieth-century music supervisor must not be simply for that which is available, but for superior means to attain superior ends. It is not enough that the end is reached, but it must be reached in the best possible manner. We are all agreed that sight-singing involves the most exact and instantaneous appreciation of the meaning of a musical sign; that these musical concepts and signs have to be built, as it were, into the pupil's mind; that anything short of this is a delusion and an imposture.

In watching the drills on tone-relationship we have been impressed with the fact that some teachers scatter much after the manner of a shot-gun, covering a wide range, but doing little execution. Concentration on a single point is a necessity. We must learn to find the weak spot in the difficulty, and not have the difficulty find the weak spot in us.

It has also been observed that where the cry of “overwork,” “too much expected,” “impossible course of study,” has been heard, there has been some aimless teaching indulged in; or, to use the language of a noted general, “too much skirmishing and not enough battle.” What a moral exaltation there is in bringing all of one's powers to bear upon some objective point, and, when we have accomplished this, to be able to look upon it as a kind of measure of ourselves and of our capabilities!

Has it occurred to you that there is a vast waste of energy in standing around? Pearls are obtained by diving for them; they never turn up on their own accord to the waiting “Micawbers.” It is suggested that no man with his hands in his pocket ever did anything except change oxygen

to carbonic acid. Enthusiasm accomplishes the work of this world ; to it we are indebted for our greatest reforms, our greatest battles, our greatest victories. We have been deeply impressed during the past year with the fact that, even where the present attainments of the teacher were limited, if he was brimful of enthusiasm, he was a hundred fold more successful than one who had greater skill, and perhaps a better furnished mind, but who was not so enthusiastic in his work.

We are forced to agree with Carlyle as we read in *Sartor Resartus* :

Much more of mind, which grows, not like a vegetable (by having its roots littered with etymological compost), but like a spirit, by mysterious contact of spirit ; thought kindling itself at the fire of living thought. How shall he give kindling in whose inward man there is no live coal, but all is burnt out to a dead grammatical cinder ?

It is thought that the educational fire has been burning with especial fervor among the music supervisors of the nation during the past twenty-five years, for perhaps in no other study taught in the school curriculum have there been such vast changes, and for the better, as in the presentation and teaching of music in the schools. Some of us have been more cautious than others in casting aside the old and tried, and adopting something merely because it was new ; waiting, perhaps, for it to be proven better before according it the preference. But when the superior merit of a new method has been fully established, we have not been slow in banishing all narrow prejudice and giving to it hearty approval.

The supervisor's vineyard is the ideals in the minds of those with whom he is working—their taste, judgment, and standards of excellence. He is to be found in the schoolroom, at the side of the teacher, giving advice, model lessons, withholding no good thing. Here it is that plans are suggested, experiences compared, the successes of each becoming the possible successes of all. Supervision is not a success unless the supervisor bears in mind the distinct activities with which man is endowed—the intellectual, the moral or spiritual, and the physical ; activities not separate in our musical work, but more or less united thruout our course of training, often blending in the same exercise.

It behooves us to see that teachers know the point of each lesson, whether its special end is knowledge or power or skill, and it is obvious that the more clearly this end is seen, the wiser will be the plans, the more skillful the execution, and the more fruitful the results. Further, if the pupil sees the aim of the lesson, then expectation will be excited in his mind—a most favorable mental disposition for the beginning of instruction. He will thus be placed in the circle of thought in which he is to move, kindred ideas will arise that will be most welcome aids to the acquisition of that which is new, and he will thereby be given a stronger impulse to exercise his own will.

Some may say that there is no royal road to music, but it is thought that there are some ways that more than others hold the clue to the

overgrown path thru thorny mazes to the inner recess where lies the "sleeping beauty," only waiting for the right voice to awaken her.

THE RIGHTS OF BOYS AND GIRLS IN MUSIC EDUCATION

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My subject refers to the rights of children to learn music, to enjoy the uses of music, and to profit to the fullest extent in all ways by the right study of music.

That the children of our country are enjoying these privileges to the fullest possible extent—no. That it is the purpose quite generally that they should enjoy them—yes. That there are methods in abundance which the makers and sellers thereof declare will serve the purpose of such instruction and use—yes. That there are many supervisors and music teachers who shout "Eureka"—yes. As to the capability of children to enjoy and profit by the right musical instruction and training—yes, emphatically yes! That music teachers appropriate these facts is manifested by their zeal, albeit much of it shows lack of music appreciation and knowledge.

That those directly interested in the problems of musical training realize that much is needed is evidenced by the many investigations and experiments, consultations and conferences, now going on, at this and other conventions, national, state, and sectional.

A great obstacle in the way of progress is the fact that school superintendents are satisfied if music is on the curriculum, and if children sing and go thru all forms of the study. They seem to forget that to make music a profitable study in the schools requires the same care as other well-established subjects.

It is the individual child that is to grow into an understanding and mastery of the musical art. Teaching is of value only as it administers to the natural growth of the one who is to learn and to develop. As far as we know, the process of growing in organic life is as follows: a germ—God-given—is awakened to life by being placed in proper conditions; this awakened germ reaches out after its food, which, being supplied in right kind and condition, it appropriates, and by processes of its own extracts therefrom that which nourishes, enlarges, and perfects its functions, or, as we say, causes it to grow.

So in building up the mind, the building of which is similar to the body, a thought in the mind cannot be woven into the mental body until after it has gone thru a process similar or akin to digestion in the physical body. The thought, by a process of reflection and drill, becomes familiar and in condition for nature, the mind-builder, to weave it into the mental structure.

The building of artistic or æsthetic power, and the ability to do things certainly and well, are accomplished in a precisely similar manner. The mind must comprehend and understand distinctly what is to be done. Attention and intelligent effort continued at regular intervals, each time gaining a little, gradually build up the power to do.

The teacher's work is to bring to the pupil's attention, in a clear, definite manner, the real things that the learner should understand and accomplish. The teacher is then to direct the pupil in his efforts to do the required thing, encouraging, giving him ideals and material to work with, until the pupil grows gradually into the required knowledge and mastery.

It will be observed, first, that the pupil's mind must be his own director in his practice, and that unless the mind comprehends correctly the thing to be done it is a mere mechanical process and will not lead to success; second, that new topics should not be taken up until practice and drill have given considerable facility in doing the thing in hand; third, that the teacher must know the subject thoroly and be able to execute well herself, and must understand the proper order for the introduction of new topics before she is permitted to teach.

Regular grade teachers, who have not yet reached this stage of preparation, should at once begin a training that will culminate in such qualifications. It will not do for them to say: "I cannot." "I have no talent for music." "I have never learned to sing." They must say, instead: "I cannot do it now, but I will in time."

Thoro work is the only kind that should be allowed in the study of the music language until right singing of melodies and parts is well done, and the singing of new music and the writing of one's own musical thoughts and the music he hears are done as readily as he reads and writes his native tongue.

The use of the voice in singing should also be just as intelligent and correct, not only that beautiful tones may be made, but that the quality of tones may be adapted to the sentiment expressed, and that singing may be in right keys, strictly in time, with right rhythm, beautiful phrasing, and with the proper spirit and abandon which make singing a thing of life.

Lack of time forbids mention of the simple methods by which these things may be done. There is a place in the schools for the daily use of national songs, sentimental songs, sacred songs, and the songs occasioned by the various school work and duties. This daily singing belongs to the school as an exercise, and should not be regarded in a strict sense as music study or as a music lesson.

It will also be observed that to put each pupil into the proper condition to receive and profit by instruction, and to practice as he should, is a large undertaking; yet it must be done, or the pupil will not learn.

Pupils often have aversion to hard work, and especially to the repetition which is necessary to the building up of right doing and of artistic power. But this must be done, or there will not be correct music work. There often comes a temptation to diverge to something else, to waste time by senselessly singing songs, or other things that simply "kill time." Of course, this must be avoided as a pestilence.

To reach a point where the pupils are rightly attentive, and disposed to make proper effort and to enter heartily into the earnest and indispensable daily drills or practice, is itself a thing to be grown to, and will come if proper means are used. If a teacher does not have such a school after a time, it is usually her own fault, and she should seek to mend her ways and fit herself to do better, or quit the profession.

There is not time to speak of the reflex influences of right school music teaching and right song-singing in school upon the educational forces in the community, nor of the importance of awakening the people to a proper appreciation of the value of music education.

Children are capable of all this knowledge and cultivation; they may have it, they must have it, before they become the best and fittest individuals, most competent to perform best their functions in organized society.

DEPARTMENT OF BUSINESS EDUCATION

SECRETARY'S MINUTES

FIRST SESSION.—THURSDAY, JULY 11, 1901

The department was called to order at 3 o'clock P. M. by Mr. Templeton P. Twiggs, chairman of the local committee, who, in a brief address, introduced the president, Mr. William E. Doggett, of the Commercial High School, Brooklyn, N. Y.

The program of the day was then presented as follows :

1. "President's Address," William E. Doggett, assistant principal, Commercial High School, Brooklyn, N. Y.
2. "What Constitutes a Business Education?" I. O. Crissy, state inspector of business education, board of regents, Albany, N. Y. Discussion by L. L. Williams, president of Rochester Business Institute, Rochester, N. Y.; Randolph B. Seymour, head of commercial department, High School, Springfield, Mass.; and T. W. Bookmyer, president of Sandusky Business College, Sandusky, O.
3. "The Education and Training of Commercial Teachers," W. A. Scott, director of School of Commerce, University of Wisconsin, Madison, Wis. Discussion by Parke Schoch, Drexel Institute, Philadelphia, Pa.

Adjourned.

SECOND SESSION.—FRIDAY, JULY 12

The department assembled at 3 o'clock P. M., with President Doggett in the chair. The program of the day was as follows :

1. "What is the Function of the Public Schools in the Matter of Commercial Teaching?" Myron T. Scudder, principal of State Normal School, New Paltz, N. Y. Discussion by J. C. Benedict, superintendent public schools, Leroy, N. Y., and Harvey E. Brown, head of commercial department, High School, Rock Island, Ill.
2. "Writing in the Grades Below the High School, When the Commercial Branches Are Taught in the High School," J. F. Barnhart, supervisor of writing, public schools, Akron, O. Discussion by F. F. Musrush, supervisor of writing, public schools, Lakewood, O.
3. "The Phonograph as an Aid in Teaching Shorthand," Theodore F. Lake, teacher of phonography, Commercial High School, Brooklyn, N. Y.

At the business meeting which followed, the following memorial was unanimously adopted and ordered spread upon the minutes :

In the death of Professor J. M. Mehan, president of the Business Department of the National Educational Association for the year 1895, business education lost one of its most devoted advocates, and commercial teachers lost a valued friend. Mr. Mehan was a teacher, not for financial returns only, but because of his intense interest in young people and his desire to assist them in securing a right start in life. By the teachers who met him from day to day and from year to year he was looked upon as a leader who, while respecting the traditions of business teaching, was continually striving to adapt his methods to the business conditions of the present. His life was an example of right living; we mourn his loss and revere his memory.

A vote of thanks, tendered to President Doggett in appreciation of his services, was unanimously carried.

A vote of thanks to Messrs. Twiggs, Jewell, and Spencer, and the local committee, was unanimously carried.

Mr. D. W. Springer offered the following resolution; which was unanimously adopted :

Resolved, That the portion of the president's address which relates to the matter of the program be referred to the president of the Department of Business Education for 1902, with the suggestion that, so far as

possible, its ideas be carried out, and that a committee of nine be appointed to prepare a monograph upon the subject of public commercial education.

The following officers for the year 1902 were then unanimously elected :

President—I. O. Crissy, Albany, N. Y.

Vice-President—J. H. Francis, Los Angeles, Cal.

Secretary—T. P. Twiggs, Detroit, Mich.

Respectfully submitted,

EDWARD W. STITT, *Secretary*.

PAPERS AND DISCUSSIONS

PRESIDENT'S ADDRESS

W. E. DOGGETT, ASSISTANT PRINCIPAL, COMMERCIAL HIGH SCHOOL,
BROOKLYN, N. Y.

The department of the National Educational Association in which we are interested should be second in importance to none of the sections of educational activity which are fostered by the parent organization. That it is not as prominent as some other departments is owing to several reasons, the chief of which, it seems to me, are: first, its needs are not understood and its importance is not appreciated by the controlling officers of the general organization, altho its possibilities are beginning to be vaguely realized; and, second, those of us who are actively identified with commercial work have not, so far, shown that we have either the disposition or the ability to command for our department a recognition to which it is justly entitled.

Last December it was my pleasure to attend the session of the National Federation of Business Educators held in this city. This is the representative association of those who are engaged in commercial work in private schools, either as teachers or as proprietors, altho both public-school principals and teachers are welcome as members or as participators in the programs of the various sections. There was marked enthusiasm shown on all sides, and, barring slight differences of opinion attendant upon the canvass for the election of officers, there was practical unanimity of spirit and purpose. To me, as president of the business section of the National Educational Association, these facts stood out in bold array, and made a favorable showing when contrasted with the condition of innocuous desuetude which our department seems to claim as its normal condition. The fact is, the business-college proprietors know what they are about, and know what they want, while we are not united upon any plan of action, have not yet decided on proper courses of study, and have not even come to an agreement as to what a commercial education is. Just here I am assuming that, while all who are engaged in the

teaching of business subjects in either the public or private schools are eligible to join this section of the National Educational Association, and are invited to give it cordial aid and support, the public-school interests should here be given the right of way. At all events, this is the only association of national importance which will ever undertake to solve the problems of commercial education in the public schools of the United States. This being the case, we who, as public-school teachers of the several states whence we come, are engaged in the great work of public education, should feel the weight of a grave responsibility. We should realize that we are public servants hired to serve the interests of those intrusted to our educational keeping. We should feel that our duties are not confined to assisting, to encouraging, to leading, to directing, to urging our pupils to make the best of their school opportunities, and to showing them the way. We must bring home to ourselves the fact that our sphere of action and responsibility is not limited by the four walls of the schoolroom, and that we have not done our whole duty to those whose servants we are until we have used our influence, be it great or small, in bringing about a correct solution of the most important educational problems of today. In this country no great public question is settled until it is settled in the right way. To bring about this settlement, conscientious, intelligent, scientific research, joined with sound common-sense, is needed; and only such conclusions as are reached after careful reasoning upon correct premises should be accepted. This means that our present standing among the powers of the earth, with all the possibilities which the policy of commercial expansion upon which as a nation we have entered opens to us, should be kept in view. The truth that, as a nation, we are rapidly approaching that stage of development in which, to all intents and purposes, we shall be industrially and commercially independent of the rest of the world should be considered.

Another potent factor in determining our conclusions as to what is best for public commercial education should be the matter of industrial trusts. For some time to come at least, or until the powers and scope of the trusts are limited or modified by governmental action, it must be borne in mind that the number of opportunities for the youths of this country to become independent proprietors in almost any line of business which they may undertake has been very much decreased. Another most important element to be considered is the time limit which is imposed by the insurmountable conditions of home surroundings or poverty, upon the great majority of the pupils of the public schools, especially in the large cities and industrial centers. If a pupil cannot, by any means in his control, stay in the high school for more than one year—and he knows it, and his teachers know it, and all concerned know it—it seems to me almost criminally absurd to place such a one in a so-called commercial course, and force him to do exactly the same work as would be suitable for

a pupil who had undertaken a four-years' course, unless both are taught the essentials of commercial work the first year. I have here mentioned the high school, since it seems to be generally conceded that the battleground of public commercial education will be in the secondary school. The private schools and the universities may be left out of consideration, for they are thoroly capable of taking care of themselves in this matter, and they will do so.

It is only reasonable to suppose that the present unsatisfactory condition of public commercial education in this country will not be permitted to stand; and, if the matter is not settled by those from whom we should expect to obtain aid, it will be decided by others, who in many instances are less able, either by virtue of experience or because of personal interest, to say what is needed; but who, if they have little else to recommend them for the task, at least have the courage of their convictions.

Some twenty-five years ago, I, as a teacher, attended a meeting of a teacher's association for the first time. On that occasion I was impressed by the fact that, beyond the individual benefit which the speakers may have derived from the preparation of their papers, there was little of real value to those who were in attendance. No weak or inexperienced teacher told her troubles and asked for aid from those older in the service; no subject of discussion was treated upon a broad educational basis, but was merely put up to be buffeted in accordance with the methods of the country debating society; and each one who took part seemed to feel it his special privilege, if not his bounden duty, to exploit himself. In the light of subsequent experience, it seems to me that the tendency to deliver long-drawn-out dissertations—many of which, indeed, show evidence of careful preparation—still prevails. It is my personal belief, however, that a meeting of an association like ours will derive much more good educationally from carefully prepared discussions of a few vital subjects than from listening to a large number of papers, each of which is very good in itself, but none of which bears any relation to any other. I go even farther; I believe that the work of an entire session could be most profitably spent in a conference upon such a subject as "An American Commercial Course," or in the discussion of "What Kinds of American Public Schools Are Needed?" The giving up of a whole session to the discussion of only one subject would call for the appointment of committees to consider and investigate each phase, and to report at the next meeting.

WHAT CONSTITUTES A BUSINESS EDUCATION?

1. O. CRISSY, STATE INSPECTOR OF BUSINESS EDUCATION FOR NEW YORK,
ALBANY, N. Y.

What constitutes a business education depends very much upon the point of view. From the point of view of the American business college,

which for more than half a century monopolized that education in this country, it implies neat and legible handwriting; a more or less practical knowledge of bookkeeping, business papers, and business arithmetic, including rapid calculation; some knowledge of business transactions, with a view only to recording them; some knowledge of commercial law, and possibly of shorthand and typewriting, necessitating some instruction in English. The ultimate object is solely to enable the student to "get a position." This conception of business education is also the one that has, until quite recently, prevailed generally in the public mind. It would fully meet the requirements of the well-known business-college proprietor who has frequently said in his public speeches that he is "proud that he runs a clerk factory." This sort of training, which aims only to prepare for the recording of business, may be called, for want of a better term, ungraded business education, because no definite preliminary education is required before taking it up.

I have no quarrel with the American business college, except perhaps for the incongruity of its name, and even that is now so well understood that it can no longer mislead. An institution that has persisted thru three quarters of a century, and is still enjoying, in its better type, considerable prosperity, must surely have been of some substantial use to the community. In the state of New York some of these schools have today aspirations a good deal beyond the "clerk factory" idea, and are lengthening their courses and enlarging and enriching their curriculums. They are also testing their real strength educationally in comparison with the public secondary schools, by taking the regents examinations, and in other ways getting more into line with state educational institutions. It has come to be pretty well understood that the chief weakness of the business college plan has been the attempt to build a reliable superstructure of special business training without any adequate foundation of preliminary general education.

Something over ten years ago it began to dawn on the minds of many progressive business-men and educators alike that more young people ought to be educated for a business career, and that they should be educated on a plan radically different from that usually pursued by the business colleges. The American Bankers' Association took the matter up, and in 1892 sent Professor Edmund J. James to investigate commercial education in Europe and make report thereon. This report was widely read in the United States, and it showed quite conclusively that in many matters appertaining to business education we were behind Germany and other countries of continental Europe. In his plea for the establishment of commercial high schools in America, which formed the subject of an address before the American Bankers' Association on his return from Europe, Professor James said that we could do no better than to follow carefully the course of educational experimentation in western Europe.

He found there in the curriculum of the commercial schools of secondary grade, in addition to bookkeeping and business arithmetic, business practice, shorthand and typewriting, and commercial law, many subjects of which the American business college had at that time no conception. There were, for example, two or more modern languages; commercial geography and history of commerce, including distribution and modes of manufacture of commercial products; general study of merchandise and raw materials of commerce; of money, banking, and insurance; of tariff legislation, transportation; and of maritime and international law. On the advice of Professor James, we have followed the experimentation of which he spoke, and have done much thinking and some experimenting on our own account. As a result, we have in the United States a distinct grade of secondary business education, of which the type is the four-year commercial course to be found in many high schools throughout the country. It is the aim and purpose of this course to do all that can be done within the time limitation, not only to train the youth in the most improved modern methods of recording business transactions, but also to teach him in a broad, general way how business is done. While fully recognizing all that is implied in the adage, "Knowledge is power," it is recognized also that the getting of knowledge by independent investigation and study develops the very highest power—the power of intelligent thinking, of getting at the heart of things. To accomplish its object, then, this course is not to be dominated by the technical business subjects, but the studies that best make for development of faculty will be of first importance. It will nevertheless do much in a short time to give the student a fund of valuable knowledge concerning practical business, which might otherwise take him long years to acquire, and will cultivate in him a spirit of investigation and a power of quick reasoning that will be of greatest value in business life. The technical subjects, which occupy the greater part of the last two years, should be so taught as to make some of them—notably advanced bookkeeping, business arithmetic, and commercial law—valuable mental discipline.

The curriculum of the high-school course has not yet passed beyond the experimental stage. The consensus of opinion, however, seems to be that it should comprise abundant instruction in English, with much attention to its literature and to composition, and some technical grammar. At least one foreign language should be studied for two years. As geography and history are highly stimulating to the average mind, they should receive a good deal of attention; United States history should be studied with reference to English history, and in connection with geography, both physical and political, and also with civics. The history of commerce should be studied in connection with commercial geography, and the whole supplemented by a course in economics and commercial law. Mathematics, a foundation subject, ought to include

algebra, geometry, and perhaps plane trigonometry. Two or three natural-history subjects are desirable, as tending to encourage and develop observation and original investigation. An elementary knowledge of chemistry and physics, including much laboratory work, is also desirable. There should also be instruction in drawing, rhetorical exercises (essays and declamations), and music.

The technical subjects should include advanced bookkeeping, which should be so thoroly mastered as to enable the student to take up and continue correctly a set of books in any line of business; business arithmetic, including intensive drill in rapid calculation; business correspondence and forms, with a large amount of practice in letter-writing and drawing commercial papers and all ordinary business documents, including simple contracts; business technics and office routine, including such practice in banking and other offices as will familiarize each student with the most approved modern methods of doing the work; shorthand and typewriting, and legible, rapid handwriting. There should be, if possible, some study of the raw materials and products of commerce. Dr. Herrick, director of the school of commerce of the Philadelphia Central High School, wisely begins this work in the first school year, and the students take great interest in collecting the materials and obtaining all the information possible regarding them. There should be frequent instruction, thru lectures and quizzes, on such matters as money, credit, and banking; transportation, commercial legislation, and the ethics of business. Class discussion, carefully directed, will be of great value, not only in making clear all the different bearings of the matter under consideration, but in promoting in the student easy, exact, and forcible expression and quick thinking while on his feet.

I have devoted a large part of this paper to the commercial course in the high school, because I am fully persuaded that it is thru this agency that the great majority of young Americans preparing for active life will obtain their business education. Very aptly the high school has been called the "people's college," because it is the finishing school for the masses of the people.

There is naturally, in the development of business education, a higher grade than that of the high school. The administration of this higher education is the province of the college and the university. While at the present time we cannot point to any typical example of this higher business education in America, it may be said that much has already been done in that direction. The Wharton School of Finance and Economy, attached to the University of Pennsylvania, has had for upward of ten years a four-year course, the nucleus of which is the study of economics and politics, supplemented by practical courses in accounting, commercial law, and business practice. The degree of bachelor of science is conferred on those who complete the course.

The Universities of Chicago and California have also announced colleges of commerce. In these institutions it is proposed to recognize the sciences dealing with the various departments of the world's trade. Last year the University of Wisconsin also determined to open a college of commerce. In a paper read before the Commercial Teachers' Federation in Detroit, last December, Professor J. B. Johnson, who served as chairman of the committee of the faculty of the university, in formulating the course of study, gave, in the language of Dr. W. A. Scott, director of the new school, the work outlined for the current year. My time will permit only the briefest synopsis of this outline, which is stated in six separate propositions:

First proposition: The student should be made familiar with the workings of the industrial organism of which he is to be a part, and to meet this proposition five lines of study are offered: (1) courses in commercial geography; (2) courses in transportation; (3) courses in money and banking; (4) courses in business organization and administration; (5) courses in economics and economic history.

Second proposition: The prospective merchant should know the various processes thru which the chief articles of commerce pass before they reach the finished state. This knowledge is furnished thru courses in the materials of commerce, in connection with the commercial museum, from the raw material to the completed article, including a study of the processes and forms of adulteration, of quality of goods, cost of making, etc.

Third proposition: A knowledge of certain branches of law is a desideratum to the business-man. Courses comprise commercial law of the United States, tariff legislation, labor, capital, corporations, and the law of foreign countries trading with the United States.

Fourth proposition: The representative of an American house in a foreign country should know the language his customers speak. Courses offered lead to a reading, writing, and speaking knowledge of German, French, Spanish, Italian, and Russian, with special attention to commercial correspondence, business and legal forms.

Fifth proposition: Physics and chemistry are used in such a variety of forms that a knowledge of them is necessary to the business-man. Courses of one year in each; also in generation and transmission of steam power.

Sixth proposition: The foregoing branches are required of all candidates for a degree, whatever line of business they expect to enter. In addition there are groups fitting for particular lines. For the coming year there is to be a group organized and conducted by J. C. Monahan, for a number of years United States consul at Chemnitz, which is to give all technical instruction needed for the consular service. There will also be a group preparatory to the banking business, and others giving the technical knowledge necessary to engage in commerce in the Orient, in South America, in the West Indies, and in Europe.

Dr. Scott says in conclusion:

We expect to learn much from the experience of the present year, and we shall doubtless largely supplement, and perhaps modify, these courses in the future We expect to place this course in commerce on the same level with the other courses in the college of letters and science and of engineering, and to grant to the student who completes it the baccalaureate degree. We believe that the educational value of the course will be in no respect inferior to that of any other course given in the university and we expect to keep in mind the fact that the young man who expects to do business on a large scale needs to be educated in the best sense of the term, as well as equipped with the technical knowledge which the prosecution of his business requires.

This is by far the most satisfactory statement that has, within my knowledge, been put forth by any American institution that has engaged or that proposed to engage in higher business education. The unreserved declaration that the commercial course will be in no respect inferior in educational value to any other course in the university, and that the bachelor's degree will be conferred on its completion, will be gratifying to the friends of business education. If American universities cannot offer a four-year course in higher commercial education that will earn a degree, it seems to me that it would be more in keeping with their dignity not to offer any.

Since this paper was written I have received and read with much pleasure the announcement of a course in higher commercial education by the University of Michigan. This is not organized as a separate school, but as a special course within the department of literature, science, and the arts. Like the Wisconsin University course, this course is intended to "provide an education equal in scope and mental discipline to any course which the university offers." Students who enroll in the course at the beginning of the third year receive the degree of bachelor of arts at the end of two years', and the degree of master of arts at the end of three years' residence.

In the course of this paper I have alluded to the advantages we have been able to derive from observation of the schools of continental Europe. There is one phase of business education, however, in which the European schools cannot help us. In the matter of bookkeeping and higher accounting we are clearly ahead of them. No progressive American — or Englishman either, for that matter — would think for a moment of following the cumbersome continental system of bookkeeping which puts everything, even to the minutest details, thru the journal; and as to higher accounting and auditing we are ahead of England, which has been, in the main, long in advance of the continent. As evidence of our leadership in this direction we have in the School of Commerce, Accounts, and Finance of New York University (Washington Square, New York city) an institution which offers opportunities for instruction in higher accounting such as cannot be found elsewhere, I venture to say, on either side of the Atlantic.

I have sought to show in this paper that the term "business education" is both elastic and broadly comprehensive; that the formal work of getting a business education may profitably engage the student thru sixteen years of school life; and that at the completion of this work there await him educational honors equal with those obtained by the graduate x
in the college of letters or of science.

Just what should be the business education for any particular individual cannot be determined by any hard and fast rule. There are so many differing conditions and limitations that perhaps no two cases are

precisely alike. As a general proposition, however, I should say that quantitatively the education should be limited only by unchangeable conditions. By this I do not mean considerations of the position to be taken, or the business to be engaged in, by the student, but conditions that determine the ability or possibility of the student going farther in his educational work. It is comparatively an easy matter for the private schools to adapt themselves to the conditions of individual students; but to what extent the public schools would be justified in attempting this I am not prepared to say, and it is too large a question to discuss within the limits of this paper. I do not believe in educating a boy with the sole idea that he is to be a bookkeeper or a clerk. I would give him such education as would qualify him (so far as education *could* qualify him) to be a successful business-man. And I would do this even if it was absolutely certain that the boy was to begin life as a bookkeeper. The more education he has besides his training in bookkeeping, the better bookkeeper he will be, and the greater will be his chances of promotion and increased usefulness. I believe that education pays in dollars and cents, no less than in personal gratification and better citizenship.

DISCUSSION

L. L. WILLIAMS, president, Rochester Business Institute.—Mr. Crissy's broad definition of the term "business education" seems to me concise and accurate. It can be as correctly stated that an engineering education is any and all education that will assist in making the pupil a capable engineer; and a medical education is any and all education that will assist the pupil to become a skillful physician. A part of school education for all special activities must be fundamental, a part must be disciplinary, and a part must be technical. The common school supplies the first; the secondary school and the college, the second; and the professional school, the third. It must be admitted, however, that all courses of study, whether elementary or professional, are disciplinary; practicing professionally is also disciplinary; work is disciplinary. Business education is, therefore, elementary and disciplinary education plus the technical knowledge necessary to enable the pupil to adapt his abilities to business purposes.

The question is how much and what kind of special training young people require to prepare them for business life. Is it wise to permit young men who design to engage in business, but who have not decided what branch of business to follow, and who cannot so decide because they cannot choose, but must engage in something without delay, to spend the time required to pursue the long commercial course prescribed by some of the leading universities? The course of study outlined in the announcement of a school of commerce of a leading state university embraces trigonometry, chemistry, physics, mediæval, modern, and American history, economic geography—whatever that is—industrial history of England, history of commerce, business forms and accounts, transportation, banking, the mechanism of exchange, business organization and management, commercial law, economics, six modern languages, etc., etc. Some of this scholastic melange would be useful to somebody; some of it would be useful to everybody; all of it would be useful to nobody. In addition to the above, the university school of business referred to has a course of study designed to prepare young men for the consular service. A student would have to spend a lifetime to become familiar with all the duties involved in

all the American consulates. So great is the variety of such duties that the chances are not one in a hundred that a young man pursuing such a course of study, even if he should some time secure a consular appointment, would find his knowledge of the slightest value to him. Again, the chances are not one in a thousand that an honor student in such a course of study would ever receive a consular appointment.

Mr. Crissy says, in substance, that the business-college idea of business education is gauged by the ability of the student to obtain a position. I submit that that is just the proper way to gauge it. A very large proportion of the young people who pursue a commercial course, long or short, do so with a distinct expectation of obtaining a position. The students of an engineering course indulge the same hope, and I doubt whether Mr. Crissy ever knew a young man to pursue a theological course with a view to preparing sermons for his individual delectation and salvation. I have no hesitation in saying that a larger proportion of the pupils of commercial schools enter such schools to obtain knowledge for their own use in their contemplated vocations than any other schools of any character. What of the design of the graduates of the university schools of commerce? Do not all, except an occasional son of a wealthy man who has business cut out for him in advance, expect to obtain positions?

Now, as to the value of the features of university business courses. In how many positions in business would mediæval history be valuable? How about economic geography? The methods and conditions of business have so changed, and are so changing, that familiarity with the industrial history of England during the last one hundred years or two hundred years would be valueless. While an occasional young business-man will have use for six modern languages, nine hundred and ninety-nine will not have use for any except the English. If every young man were to master all of the six languages, and all of the rest of this exhaustive and exhausting course of study of the university school of commerce, he would be compelled to begin in business just where the commercial-school graduate begins—as a clerk. If he study business organization and management, he will still have to begin as a clerk, and by the time he climbs in business to a point where he can hope to apply his theoretical knowledge of organization and management, business conditions and methods will have so changed that he will probably find his knowledge worthless.

The business colleges have supplied a well-defined lack in the American educational system. They have not been, and are not now, perfect, but the phenomenal popularity of the better class of them seems very good evidence that they are doing useful work. When men become as cheap in this country as they are in congested Europe, it may be excusable to ask young men to devote four years to special preparation for business, but I think it is not in this year of grace. The ideal thing, in my judgment, for every young man who contemplates a business career is to supplement a thoro rudimentary education with a good high-school course, and if possible a college course, and after that secure such knowledge of business customs and office routine as is provided by the leading business colleges of the period. If the universities would eliminate some of the less practical things from their courses of study and substitute therefor a thoro course in theoretical and practical bookkeeping, commercial arithmetic, commercial law, business correspondence, practical English, advanced accounting, and economics, and have those branches taught by practical men, not doctrinaires, they would, I believe, popularize themselves with their students and commend themselves to the business-men of the country.

RANDOLPH B. SEYMOUR, head of commercial department, High School, Springfield, Ill.—We all believe in a broad, liberal education along commercial lines, in a course of study which shall include the essentials, and in addition the studies that increase information, culture, and power of thought. Those who can follow this by a commercial course in one of our great universities will be amply repaid, and fitted for a life of satisfaction and success.

We who have had a college education can urge a commercial training without being charged with narrowness. My experience with the wants of business-men, and with the struggles, hopes, and successes of hundreds of young people, impels me to plead for the interests of those who cannot complete a full business course.

The success of the business colleges is due to the fact that they have supplied the demand for the essentials of a business training in a practical, concentrated, and thoro manner. Their weakness has been that they have tried to teach too many students who were lacking in an adequate common-school education. The aim of high schools has been to prepare students for college. They are now beginning to prepare them for an immediate active life.

Fully 50 per cent. of high-school students do not graduate, and of those who do, not over 25 per cent. enter college. The other 75 per cent., unprepared for any profession, must of necessity do something in the business world. They will become clerks, agents, traveling men, bookkeepers, managers, etc. They are entitled to a satisfactory technical training as much as their brothers are to a college preparation. But there are thousands who are unable to remain four years in high school. They must work to support themselves and those they love. For them a business training should be given as early as the second or even the first year. Some schools give a two-years' and also a four-years' commercial course, thus providing for both short- and long-term pupils.

I am not urging a shortening of the course or a decrease in the work required for graduation, but I plead for the vast number who will not or cannot remain the full time. The question is: What shall they be taught?

It is a fact that many high schools do not teach arithmetic, even in the commercial course, but substitute algebra. A business-man requires a rapid and accurate handling of figures, both mental and written, and a school should give the practice that helps to make him perfect in this direction. It is a fact that few high schools teach penmanship, but substitute drawing. Very few can earn their living as artists, but all can learn a neat, legible, and rapid handwriting. It is a fact that in most schools pupils criticise Shakespeare and the poets, but have no regular drill in business correspondence. They never write a letter of application, one ordering goods, a ten-word telegram, or a newspaper ad, and do not know the form of opening and closing a business letter, or even the folding of the sheet.

Commercial law should be taught, not to make "everybody his own lawyer," but to put him on his guard, to show the pitfalls, to enforce the fact that prudence, and perhaps the early advice of a lawyer, will often prevent a business mistake and a lawsuit. Shorthand and typewriting are becoming more popular every year, and afford a valuable English training, aside from their commercial uses.

Bookkeeping teaches accuracy and neatness. It develops thought rather than memory. Because it is practical, it interests and holds the attention, and is therefore an education and a discipline. Many schools give this subject only one period a day, expecting no outside work to be done, while other subjects are prepared outside of the recitation. To place bookkeeping on an equality, it should be given not less than two periods a day for at least a year. Unless the above subjects are taught thoroly, the student stands a poor chance of securing a position or of holding the same. The penmanship of the average high-school student is too slow and cramped, his letter of application creates a poor impression, and in a test of rapid figuring he disappoints a business-man.

You may say I am advocating a "clerk factory" idea. I am — for the thousands who demand a short course. I believe that for these boys a business life will become a stirring education, experience a teacher, and human nature an open text-book. I do not concur in the statement that those of a limited education who have made a financial success are either prodigies or geniuses. A very large majority of successful business-men are without a college education. As Edison says: "It is 2 per cent. genius and 98 per cent. hard work."

The business college should be more exacting in its requirements for admission. It should give honest advice to all, especially to those who are found incapable of doing successful work. It may lessen the bank account, but not the standing or the influence of the school.

The high school should give both a two- and a four-years' course, but making what may be termed the essentials more important. Full provision has been, will be, and should be made for mathematics, languages, and sciences. Our concern, therefore, has been for the more thoro teaching of practical, technical subjects, and for the rights of the 75 per cent. who cannot complete a full course of study. In theory, a broad complete education is desired, but we must consider the necessities and claims of the many as well as the desires of the few. Let us fit the majority as well as the minority for the struggle of life.

T. W. BOOKMYER, president of Sandusky Business College, Sandusky, O.—In surveying the whole field of business education, we observe three distinct phases of the subject which may be designated "spheres of business education."

The first, and the one so recently introduced into America, is the professional, represented by the business universities, schools of finance, etc.; the second, the cultural, as represented in that of the public high school; the third and last, but by no means the least, the practical or the bread-winning, typical of that of the well-regulated, up-to-date commercial school.

A business education from the standpoint of the university differs materially from that of the commercial school or commercial high school. The university aims to impart a scientific and professional knowledge of business in all of its relations to the transactions of the industrial world. It must reach out and utilize all elements "that tend to develop the body and senses" along the lines of business. Its scope is not or should not be limited to local conditions, nor influenced by the personal desires of its patrons nor the narrowness of its projectors. It must surmount all of these and cover the whole field of commerce, both national and international, and give to its patrons a philosophical knowledge of all that pertains to the present commerce of the world. Its aim must be more than to turn out bookkeepers and office help. Its finished product must be the rounded, well-trained business-man.

The commercial high school measures business education by entirely a different standard, a standard influenced more or less by the demands of its patrons and its facilities, based more upon the cultural than upon either the philosophical or practical. It is yet in its experimental stage, hence its standards vary. The most discouraging feature of the commercial-high-school work is that it becomes a part of what is and what has been recognized for some time as a congested department of public instruction. So long as this condition prevails we cannot hope for its being placed upon any other than the cultural plane.

From the viewpoint of the modern commercial school, business education means something entirely different from either of the two former. The philosophical and the cultural are both incidental and secondary to the practical. A thoro and a practical working knowledge of those matters of business that pertain to the office, as is demanded by well-regulated business houses, is the interpretation placed upon the term "business education" by the modern school. Call this a clerk-factory basis or what you will, the fact nevertheless still confronts us that there is a direct line leading from the commercial school to the office. It is a condition and not a theory, forced upon the commercial schools by conditions that prevail outside of their keeping and absolutely beyond their power to control. The great majority of young people that apply to the commercial school for instruction do so because it offers the opportunity of doing something definite in a short time, and with the single purpose that they may be able to secure and hold a position on its completion. The American commercial school is the only institution that

is able to take care of and direct this current of humanity, impelled by necessity and desire. And we are as firmly convinced that the position it now holds, the medium between the masses and the office, will for all time be sacred to it alone.

Right here is the distinguishing feature between the good school and the school of inferior qualities. The school that is able to hold in check this blind rush and direct it in an upward trend, so that in the end the acquirements of the pupil will meet the requirements of the best business offices, will be known as a good school, because its management has caught and comprehends the meaning of business education in its practical application to the affairs of daily life.

Business education, as restricted to the commercial school, has not so much to do with the "how much," but rather with the "how well." Just how much should be attempted is the great problem that is now agitating the commercial schools of the country. In this connection I would say that no solution to this problem can be given unless the element of time is allowed to enter and become the basis of the courses. If you are running a four-months' school, then you should be perfectly satisfied if you can in that time teach the principles of bookkeeping or shorthand with proportionate advancement in the other subjects.

Many of the criticisms made against the commercial school in its interpretation of business education are well founded, and are the results of our own folly in claiming or even attempting to do the impossible.

The commercial school can no more give a comprehensive course of instruction that will be serviceable than any other educational institution, unless it takes a sufficient length of time. We believe that there is a growing tendency among the more progressive schools to lengthen the time, which will enable them to enrich the course, and thus magnify rather than diminish the standard of business education as understood by the commercial school.

I will not attempt to give a specific statement of the subjects that should be taught by the commercial school with its understanding of the scope of business education, because of the limited space at my command and your full understanding of the subject.

With the hope that business education will be ennobled and enriched by the three great educational agencies into whose keeping it is intrusted, I would urge that every person so engaged enter upon his work conscientiously and with due respect for all departments of the work, recognizing the sphere of each, and its purpose as a means to the same great end.

THE EDUCATION AND TRAINING OF COMMERCIAL TEACHERS

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[AN ABSTRACT]

In the paper as presented four questions were considered :

1. What is meant by the term "commercial teacher" ?
2. What are the instruments of his trade ?
3. What training must he have in order properly to use these instruments ?
4. How and where can he get the necessary training ?

The answer to the first question in substance was that the term "commercial teacher" should properly comprehend only those persons who are engaged in the teaching of the special technical subjects peculiar to commercial courses. As instruments of the commercial teacher's trade were mentioned and described bookkeeping and accounts, commercial correspondence in the various modern languages, commercial law and business practice, money and banking, corporation finance and securities, transportation, insurance, private administration, commercial geography, materials of commerce, and economic history. Attention was especially called to the fact that these subjects are difficult in themselves, and that the complete mastery of any one of them involves a wide knowledge of a good many other subjects.

The answers given in full to the last two questions were as follows :

For the mastery of the subjects which have already been indicated as essential in a commercial education, training of at least four sorts is necessary :

1. A general, all-around education, such as gives a person command of all his powers, intellectual, physical, and moral, and equips him with the tools of his profession. No person can be a successful teacher who has not acquired the power of continued concentration, the power of holding in mind a large number of facts and principles at the same time, and the power of clear and logical thinking. These acquisitions come only with training of a high order, with education in the very best sense of the term. Equally important is the equipment of the teacher with the power of investigation and the knowledge of the sources whence his material must be derived, and of the way in which to organize it and make it efficient for educational purposes. No person whose ability to teach is limited to the power of reading a text-book and interpreting its contents to students is fit to be a teacher of any subject, let alone a teacher of technical branches, to students who are supposed to acquire the power of actually doing the world's work. This investigative and organizing ability is all the more necessary for the commercial teacher because many of the fields which he must enter are comparatively new. They are, however, all ready for investigation. Knowledge lies about on every hand, and the commercial teacher must be the specialist who can collect and organize it, and reduce it to the form needed for educational purposes.

2. The commercial teacher must also obtain special training in the subject to be taught. This must be thoro and complete. One must know thoroly the specific subject which he is teaching; must be absolute master of it, if he is to make it an efficient instrument in the technical training of students..

3. Business experience is essential to the commercial teacher, tho not primarily because he is expected to equip a student with the knowledge which he must possess in the actual conduct of affairs. I have already

said that the completion of a commercial education can be obtained only in connection with a business establishment, and that the primary function of schools is to prepare students to take the advantage of the experience of the commercial world and to give them the ability to acquire thru this experience complete mastery of the particular field which is to constitute the work of their lives. Business experience, however, is necessary to the commercial teacher, because he must know precisely what the problems of business life are, in order that he may teach the subjects which constitute the curriculum of the commercial school in such a way as to give the student the requisite preparation. One may teach the subjects of commercial geography or economic history or commercial law or bookkeeping or insurance in such a way as to make them practically useless for the purposes of the business-man; or they may be taught in such a way as to give young men the precise preparation needed for the solution of the actual problems of business life as they arise.

4. Some knowledge of the science of education is as much needed by the commercial teacher as by any other member of the teaching profession. Precisely how this training can best be obtained is a topic for specialists in this field, and cannot be discussed here.

I am willing to admit that occasional examples of self-made teachers are found, but they are so rare and unusual that their consideration will not assist us in laying down rules for the guidance of the generality of persons. Any man who is familiar with educational work and with the real meaning of the qualifications which I have indicated as essential will not hesitate to declare that the education needed by a commercial teacher cannot be secured outside of the colleges and universities of our country. The general all-around training which gives a person command of all his powers and equips him with the tools for independent investigation cannot be acquired by a person who stops with the secondary school. It is a rare thing, indeed, to find a student prepared for college who has acquired the power of concentration and of clear thinking, to say nothing of the special equipment for independent investigation of which I have spoken. Indeed, college teachers will agree that at least the first two years of a college course are necessary to give the student command of his own powers, and it is rarely found profitable to begin his training in the line of independent investigation before that stage has been reached. The experience of educators everywhere indicates that a long period of careful, systematic, specially directed training is necessary to acquire the sort of power that I have indicated.

Until the present year much of the technical training necessary for a commercial teacher could not be obtained even in the colleges and universities of our country. Fortunately during the last twelve months several of our universities have made special provision for this branch of

instruction. The Universities of California, Pennsylvania, the City of New York, Michigan, and Wisconsin have established special schools of commerce, or commercial courses, designed to furnish precisely the sort of training which is here under consideration. The curriculum of some of these institutions is very far from complete. Most of them, in fact, have done little more than make a beginning; but all expect in the very near future to complete their equipment along this line. The University of Wisconsin has at the present time a completely rounded four-years' course, with graduate courses for those who desire them. Candidates for positions as commercial teachers, therefore, no longer have the excuse of not being able to obtain the special technical training which they desire. It can now be furnished in the institutions mentioned, and one and all are cordially invited to take advantage of the opportunities which now exist.

The acquisition of the business experience necessary for the commercial teacher could, in my opinion, be obtained during the years of one's college or post-graduate course. None of our higher institutions of learning continue in session during more than nine months of the year. Three months are, therefore, left available to the student for other forms of activity. It would be entirely possible, in my opinion, and highly desirable, for young men who are preparing themselves for the work of teaching, to avail themselves of the annual three months' vacation for the acquisition of business experience. Positions of various sorts could be obtained and a considerable variety of experience could be acquired during the four vacations, the whole period aggregating one year of business training.

I am well aware that the standard which I have set up is a very high one, and that comparatively few of the commercial teachers of our country will be able to measure up to it. It is eminently desirable, however, that a proper standard should be placed before us, and that each one of us should comprehend the requirements of the profession in which he is engaged. Summer sessions of the universities are now common. The University of Wisconsin is this year holding a summer session of its school of commerce, and will doubtless continue to do so in succeeding years. It is entirely possible, therefore, for persons already engaged in the work of teaching to supplement their training and approach the ideal without dropping their positions or depriving themselves of their present means of livelihood. No teacher can afford in this day and age of the world to stand still. Each one of us must constantly increase and improve his equipment, and, however far short of the ideal our attainments at the present time may be, we should not be discouraged, but, on the contrary, determine constantly to improve and enlarge our equipment until we have made such an approximation to our ideal as is possible.

DISCUSSION

PARKE SCHOCH, director, Department of Commerce and Finance, Drexel Institute, Philadelphia, Pa.—I purpose limiting my discussion to the education and training of commercial teachers for public high schools, because I believe that is the field of education in which commercial teachers are most needed today. I shall discuss the subject under five sub-topics.

1. The condition of commercial education in the United States today as a gauge for the need of specially trained teachers.

If we were to determine upon a definite time to mark the beginning of a universal interest in commercial education in this country, we should say that it dates no farther back than three years ago, and that it is closely associated with the Spanish-American war. It was that war which first revealed to us our larger position politically among the nations of the world, and it was the rapid growth and expansion of our trade following the war that impressed us as a nation with the importance of so fortifying ourselves educationally that we might win commercial supremacy as the only sure foundation for gaining political pre-eminence. I do not mean by this that prior to 1898 commercial education, in some form or other, was entirely wanting in the United States, for I am not unmindful of the existence before then of private schools of business, and of commercial courses in a few high schools and academies. I mean, rather, that the general awakening of the people to the desirability and necessity of commercial instruction as a feature of the public-school system has come within this brief period. Indeed, today there is scarcely a city of importance in the United States that has not in operation, or in process of formation, either a commercial department in the regular high school or a separate institution known as a commercial high school, with a course of study covering two, three, or four years. In addition, we must note the growing favor constantly shown by academies, colleges, and universities to commercial education. The tendency here to make way for the new training is scarcely less marked than among the high schools. Therefore, we cannot but agree that already sufficient emphasis has been given to the commercial idea in education to demonstrate the need of good teaching ability.

2. To what extent has this need been met, and thru what channels?

So far as the more specialized forms of business training are concerned, such as book-keeping and stenography, the demand for teachers in the public schools has been supplied by the business colleges, and on the whole, no doubt, satisfactorily; but wherever there has been need for a teacher to organize and direct a full commercial course there has been found a scarcity of men and women capable of filling the position. The intellectual equipment for teaching of this kind should embrace a knowledge of commercial geography, commercial law, banking, finance, etc., as well as the more practical subjects already mentioned. Positions of this broad nature have been given largely to experienced business-school instructors who, by lifelong contact with this specialized form of education and by patient personal effort, have fitted themselves to formulate and conduct such courses as the times demand; still they are generally lacking in that liberal education and in that knowledge of pedagogics so necessary to the equipment of every teacher who is to be of greatest service to his school. One other source has partly met this call, namely, the public school itself, from which teachers, with the normal training already in hand, have gone out to pursue courses in the commercial subjects, and then have returned, sometimes, to the same school, to engage in the newer work.

Up to the present time, then, there has been no systematic training for commercial teachers, and the high schools have been obliged to accept what the teaching market offered, or to release their own instructors long enough to enable them to acquire a knowledge of the new subjects.

3. What constitutes an adequate education and training for the commercial teacher?

In considering this question, two kinds of teachers suggest themselves: first, the organizer and director of commercial courses or departments; second, the specialist whose object it is to fit himself to teach one, or at most two, of the commercial subjects. At this early stage of development the former is possibly more in demand than the latter. Schools that are passing thru the experimental period in dealing with commercial instruction are naturally careful not to give undue emphasis to the practical side of their courses, and hence ask for teachers who can engage, to a limited extent, in giving instruction in all the commercial branches to be taught. The best preparation for positions of such general usefulness should have at its base a college education, the education afforded by the classical or scientific courses of our colleges and universities. Upon this the aspirant to teach should build, as a superstructure, his commercial education. This should embrace a knowledge of economics, commercial and industrial geography, history of commerce, commercial law, questions of finance, mechanism of commerce—by which I mean banking, transportation, stock and produce exchanges, etc.—commercial arithmetic, bookkeeping, business customs, commercial correspondence, and stenography. While he will not be called upon to teach every subject here named, he himself needs to have the advantage that the training in them gives, and he must have a sufficient teaching acquaintance with each to know its needs in its relations to all the others. The languages—French, German, and Spanish—one or two of which he should know, he will have gotten in his college course, or they can be provided for in his commercial training. He should also be informed upon the history of education, upon methods of teaching, and upon educational organization in general.

4. What kinds of institutions are best equipped to furnish this training, and what suggestions can be made for an enlargement and betterment of the facilities?

As our educational institutions are constituted today, the coming teacher has not much choice in his efforts to secure the preparation just laid down for him. After completing his college course, or laying an equally good foundation in some other way, he must turn for his special training either to the old-line business school or to the newer schools of commerce as they at present exist in such universities as Pennsylvania and Wisconsin. The former, by reason of their well-known limitations, can at best give but a fragmentary training, wholly inadequate for the requirements of positions that presuppose administrative as well as teaching ability. While they can well equip the teacher in the more practical lines of commercial arithmetic, bookkeeping, and stenography, they fall far short in their instruction in commercial law, commercial geography, and economics. On the other hand, the universities pay little or no attention to the first group of studies, but furnish admirable training in the last. Neither class of schools, therefore, can give just what is wanted, and neither has yet promised a course exactly adapted to the needs of the teacher. To supply this want, the Drexel Institute established three years ago what it calls a Commercial Course for Teachers, in which great pains were taken to include every technical subject that would likely enter into the organization of a commercial department in a public high school.

I believe the state owes much to the public along this line. If we are to have commercial education under the auspices of the state, we can rightly look to it to make provisions for the training of its teachers. There ought to be a reorganization of the state normal school, as it now exists, so that those looking to the profession of teaching can receive just as good preparation in bookkeeping, commercial arithmetic, commercial geography, and commercial law as can now be had in English language, mathematics, history, and literature. In fact, I regard it the duty of the state to create and maintain normal commercial courses, and think it the only way to solve systematically and comprehensively the growing question of commercial education in the public schools.

5. What are the opportunities and rewards which commercial teaching holds out to those who contemplate entering upon this field of educational work?

Commercial education, once held in disparagement by the general public and by the

institutions of so-called higher learning, has won its way into the esteem of the people, and is rapidly breaking down the barriers maintained against it by the college and university, and receiving from them equal recognition with the education in the arts and sciences. This of itself makes the new work attractive. Again, we are now pre-eminently a commercial nation, and, as events today presage our early commercial supremacy over the rest of the world, there will be steadily increasing interest in, and attention to, the education that alone can keep us in the van; and thus will the opportunities for professional growth be annually enlarged to those who have early fitted themselves to take advantage of them.

In a material sense, the present condition and future outlook are no less promising. Many are the applications for teachers that have come to my notice during recent years, the salary attached, in each case, being from a third to a half more than is paid to teachers of equal rank in other lines. This fact has attracted instructors of from two to fifteen years' experience in general school work out of their positions, in order to fit themselves for the more remunerative places in the commercial courses.

THE DUTY OF THE PUBLIC SCHOOL SYSTEM WITH RESPECT TO BUSINESS TRAINING

MYRON T. SCUDDER, PRINCIPAL OF STATE NORMAL SCHOOL, NEW PALTZ, N. Y.

A few days ago I glanced thru the "Help Wanted" columns of the New York *Herald* of June 23, for the purpose of noting what qualifications were sought for by business-men in the boys they wish to employ. Here are some of the expressions used under the heading "Boy Wanted," all found in two columns: "Not afraid of work;" "quick and accurate at figures;" "thoroughly reliable;" "willing to work hard;" "must write a good hand, be correct at figures, and neat in appearance. Application must be in his own handwriting;" "must be neat and bright;" "must be neat and a good penman;" "must write a good hand;" "must address in his own handwriting;" "must be a good penman, accurate, and intelligent;" "must be good writer;" "bring specimen of handwriting;" "must be industrious and come well recommended, write a good hand, and be accurate at figures;" "plain writer wanted;" "must write legibly;" "one who can write a good hand and willing to work conscientiously;" "must be correct in figures, write plainly and rapidly;" "must write a good hand and be correct at figures;" "active young man, good penman, not afraid to help around;" "must be good penman, and quick and accurate at figures;" and so on; an almost endless repetition, you see, of the demand for good penmanship, accuracy in figures, neatness in appearance, willingness to work, and general reliability—nothing more. Advertisements of the same nature, seen elsewhere, call for "temperate," "industrious" boys, and declare that "those who use tobacco need not apply."

Now, here we have a very brief, simple list of qualities apparently

easily acquired, yet which, when possessed by a boy, seem to many business-men to constitute a very fair equipment for modern business life. But are they a common characteristic of our schoolboys?

I once gathered from a multitude of business and professional men in one of our eastern cities a number of replies to this question: "In what respects have you found the young people who come to you for employment deficient?" Here, again, I insert verbatim replies; I take them as they came: "Lacking in willingness to begin at the bottom." "Girls tend to business better and are anxious to learn, whereas the boys look upon work as an unnecessary thing for them, and seem to be above manual work." "Lack in willingness to *earn* promotion before demanding it. They are afraid they will earn more than they get." "The young people who come to us are deficient in almost everything necessary for my business" (a large department store). "Deficient in figures, spelling, and composition." "Deficient in business methods and courtesies, and especially in application to details of business." "Lacking in humility and good temper." "Can't write."

Says another at greater length: "They are deficient in spelling, composition, punctuation, rapidity and accuracy in figures. In selecting clerks I have given preference to high-school boys, and, much to my regret and dissatisfaction, I have, as a rule, found them not qualified for business in its simplest forms. . . . The chief and most important faults I have to find are: (1) They have not a handwriting fit for a business. I have been obliged to turn down more high-school boys for this reason than any other. (2) Their knowledge of plain arithmetic is, as a rule, exceedingly defective. (3) Their knowledge of the geography of the United States alone, not to mention other parts of the world, is simply lamentable." Another merchant says: "Common-school graduates who apply for positions as clerks and bookkeepers are woefully lacking in the following particulars: (1) penmanship; (2) mathematics; (3) a knowledge of business forms and practices." An exceptionally successful man writes: "The greatest blessing a young man can have is good health; next to that, a good moral character. I do not think our schools emphasize enough the fact that to be successful in life one must be honest. If a young man comes to me who has ability to read, write, and spell well, to use good English, to compose a good letter, and to express his thoughts clearly and concisely, and is clean, bright, honest, and gentlemanly, I will employ him."

Just one more quotation; this, too, from a prominent man. He believes in starting boys in business very young, for he fears too much schooling, or too little of the kind of schooling that schools ought to give but don't give, or something else that happens in school, will "knock enough hustle out of the boy and put enough foolish pride into him to more than offset the additional knowledge he gains. You have probably

heard of the lad who, in reply to an advertisement for a boy, wrote: 'I want that job, Mister. My father is dead and I have got to hustle, and it beats hell how hard times is.' That boy can, and probably will, make up any deficiency, so far as reading, writing, and ciphering are concerned, in a night school. He will amount to something, while most other boys act as though they would need to tie up with their fathers or some other indulgent relative."

Now, in the light of these replies, and from what you hear from teachers and business-men everywhere, and of what we know of the pupils in the schools we represent, I wonder if the following is too sweeping a statement. After a boy has been in school eight or nine years — I mean almost any boy in almost any school, tho there are exceptions to both the boy and the school — there is nothing that is more likely to be true of him than that he is a slovenly penman, an unreliable speller, a poor reader, unable to compose a creditable letter, and unsafe where the fundamental operations of arithmetic are concerned; that is, you can feel no degree of certainty that he can add, subtract, multiply, and divide with even fair accuracy, to say nothing of rapidity. Added to this, his disposition toward work and his attitude toward the world are not as likely to be helpful, cheery, and willing as we could wish. Nay, we can go farther, and say that if this boy should go thru a high school, and even thru college, he would be little, if any, better off with respect to these simple essentials of business training than he was before. Many would hold that he would likely be worse off. Note the incessant complaint of college examiners, of normal-school and of high-school teachers. Yet, if that same boy, after leaving the grammar school, or the seventh or eighth grade, should enter a reputable business college or institute, it is more than likely — it is highly probable — that he would come out in six months or a year a good penman, a fair speller, reliable in the fundamental rules, and acquainted with business forms, besides having picked up some bookkeeping, shorthand, and typewriting. Is there not something we public-school people can learn from the business colleges? What is the secret of their success?

Querying thus I wrote, a few days ago, to one of the leading business educators¹ in the country, and here is his reply:

I shall be very glad to give you anything I can toward mending what I have long observed to be unnecessary deficiencies in the work of some of our public schools. There is room for a great improvement in the very directions to which you refer. Nine out of ten of the young people who come to this school write poorly and are deficient in arithmetic, and, I am sorry to say, too often incapable of expressing themselves, either orally or in writing, with propriety or clearness. For all ordinary purposes of life, these three accomplishments are worth more than anything else a school can give. I do not rate the ability to keep accounts or to write shorthand as of comparative value. Both have great significance in less degree, the one as an assimilator of arithmetic, the other of language.

¹ President C. C. Gaines, Eastman's Business Institute.

Because a business school has devoted itself to these simple things, it has been a success. It will continue to have a definite function in the educational scheme of the country only so long as the public and private schools, from the primary grades to the university, fail to impart what men should get from them who would begin life in business establishments. The only reason the business school is able to do the things of which you speak, in what seems to be an incredibly short time, consists in the fact that it makes a drive at these special things, and all its drills are given with the intention of producing efficiency in them. To illustrate, we can give almost any person a good handwriting in three months, but the time of that person will be occupied with the writing master almost exclusively during the period. That is all there is of it. One thing at a time, and that thing done thoroughly. Only a new habit with reference to the thing in hand is fixed.

I think, too, that ethical instruction is a matter of first consequence, yet I am afraid that it is too generally neglected in the homes of a large number of the American people. I want this taught along with the elements: reading, spelling, writing, etc.; then nature studies relating to the outside world, such as geography, etc., plants, animals, and especially man, from the biological point of view. I believe in putting all these things into the very earliest teachings, for the reason that they have greater power of exciting interest and inspiring a love of study than almost anything else children are likely to meet with in books.

The next important field seems to me to be the sociological, and this should include economic significance, social and commercial relations, etc. It seems to me that it is along these four lines: ethics, elements, nature, and sociology, that our courses for the instruction of young people should be developed. There is only one other thing to add, and that is that our public schools do not compare favorably with the schools of England or those on the continent, with reference to these matters, and I feel very sure that methods may be devised whereby their work may become very much more satisfactory.

Well, here it is again, the old call for more subjects in the curriculum with no let-up on the thoroughness of the work. Yet we are in a most suggestive part of our subject, and I will briefly outline a thought or two suggested by the remarkably interesting and instructive letter just read, with the hope that further elucidation may come from those who follow in the discussion. It appears, then, that sound character, including good citizenship, willingness to work, and efficiency in penmanship, arithmetic, and English, are the great ends in elementary training for a business career. This efficiency is to be attained in spite of the multitude of subjects that are in the curriculum.

Of course, better teaching is one of the factors in the solution of the problem, and every year sees a gain in this respect. There must be more snap and go in the teacher's work, less carrying out of some patented method. Our methods are apt to become so highly specialized that the subject-matter is lost. In recitations we must have a care, not so much that a method of procedure is carried out successfully by the teacher, as that something is actually learned or done by the pupil in the quickest way and with sufficient variety and drill.

In a business college, if a student needs to know some certain thing before he can take his next step, he is told that thing promptly, emphatically, and with the least possible expenditure of time; in the public

school it is too often true that everything is held up until the pupil is "developed." An immense amount of time is wasted this way.

Another way of securing better results and quicker results with children is by being more "up and down" with them, as the expression goes. Very often we are too easy with them for their own good. We "coddle" too much. *Some* "coddling" is good, and to ease up occasionally is wise, but it is well to remember that being too easy with children is not necessarily being kind to them. Many a child is spoiled by too much of that kind of kindness.

The recitation must be "business" from one end to the other, and in that respect should be an admirable preparation for business life later on. This does not mean that school life should be cold and unfeeling; that old-time coercion should be practiced, with its harsh disregard of child nature and child rights; or that Gradgrinds should hold sway, and the terrible stuffing methods prevail that killed young Dombey; all we ask is a vertebrate pedagogy of teaching and of training, in place of a "lax, molluscan liberalism," deplorable in its effects upon young humanity.

But there is another factor in the success achieved by business schools, in respect to the "elements" referred to in the letter I read, that is significant. A business college does not want young children; none younger, indeed, than fourteen or fifteen. Why is this? Simply because prior to that they know they cannot get satisfactory results. The mind is not ready for specialization. All the drill of those earlier years is as nothing compared to a few months of drill *after* the mind is matured enough to profit by it. Are we not, therefore, wasting time by dwelling so continuously on these elements in the earlier grades? Is not our hope of achieving thoroness thereby in vain?

Much stress is being rightly placed on the importance of waiting to introduce a subject to a child until the child is ready for the subject. Of course, when the proper time has arrived, then without delay must the stimulus be applied. For, in the development of children, as in the affairs of men, "there is a tide . . . which, taken at the flood, leads on to fortune; omitted, all the voyage of this life is bound in shallows and in miseries." We teachers have been great sinners in respect to these matters, and have tried to force pupils thru their subjects before the cerebral development was equal to the task, or have waited until the tide of nascency was at an ebb.

Take as a single illustration the teaching of arithmetic. Who has not heard of children who, with apparently no capacity for this subject, had dawdled along year after year, until, suddenly awakened to an appreciation of that to which they had previously been indifferent, they were able to accomplish in a few months what they had vainly attempted for years? Who of us would not undertake, with a pupil fourteen or fifteen years of age, who had had no formal schooling in arithmetic, to teach him in a single

year all the arithmetic that children usually get by struggling thru several years of the elementary school? This waste of time is what genetic psychology teaches us to expect when child nature is not sufficiently considered; and if, in the light of this psychology, we review all the subjects of the curriculum, we shall understand why President Hall thinks that "there is involved here the question of the reconstruction of almost the entire school course." Certainly the point may well be made and heeded that one way of shortening a grammar-school course and of getting better results from it is not so much by starting pupils earlier and getting them thru their studies sooner as by introducing each subject at the time when the cerebral development is ready for it, and it can be done with the greatest economy of time and effort.

The business college realizes this, or, at any rate, acts in accordance with it, when it opens its doors to boys and girls just in time to take advantage of the flood-tide of certain nascent powers, the power of doing things in a mature way as well as the power of appreciating their value.

Now, from what has been said above, our propositions with respect to training for business in the grades may readily be made. Moral instruction is of supreme importance. It is taken for granted, also, that the ability to read, write, and spell well, to use good English, to compose a good letter, and to express one's thoughts concisely and clearly, is to be attained. Greater efficiency may be secured and time saved by wise methods of teaching, and by a "business way" of handling children, useful hints concerning both of which may be gained by observing the work of our best business schools. Time may also be saved by making readjustments in the curriculum, giving arithmetic and geography, for instance, far less time in the lower grades, doing them in a year and a half or two years in the last of the course, instead of spreading them thru eight or nine years. This would make the question of the crowded curriculum less embarrassing, and give room for manual training, domestic science, and art, and other subjects insisted on in modern school life.

Elementary bookkeeping should form a part of the course, for its own sake, and to serve as an "assimilator of arithmetic," as President Gaines of Eastman's Business Institute puts it. It not only clinches what is learned in arithmetic, but gives an objective point for the study of arithmetic that appeals to the rapidly developing practical instincts of adolescents. It would be well, too, if shorthand could be introduced in the late grades, as an "assimilator of language," as well as for its disciplinary and subsequent time-saving value. Ethics, talks on success, exhortations to manly activity, lessons on responsibility and reliability, should permeate the school life, while practice in debating, in deliberating, and in the art of public speaking should be as frequent as possible with the older pupils. It is desirable, too, that pupils become somewhat acquainted

with office work, viz., copying, mimographing, indexing, card cataloging, typewriting, etc.

But the duty of the public-school system with respect to business training is not confined to the grades. The high school is a permanent part of this system, and in the curriculum of every high school the commercial branches are entitled to just as much respect and deference as are Latin and Greek.

I insert here a suggestive three-years' commercial course, without foreign languages; the figures in parentheses indicate the number of lessons per week:

FIRST YEAR.

English (literature; composition; grammar; rhetoric) (4).

History (with special reference to the development of industries, trade, and commerce) (3).

Algebra (5).

Physical geography (3).

Bookkeeping; commercial arithmetic (5).

Drawing (1).

Stenography may be taken as an additional subject in the first year by pupils whose work in every other study is entirely satisfactory.

MIDDLE YEAR.

English (literature; composition; grammar; rhetoric) (4).

Geometry (4).

Modern history (3).

Business practice (4).

Commercial geography (1).

Chemistry and physics (half-year of each) (5).

Elective.—Typewriting and stenography (5). (May be taken by those only whose standing in all other studies is good.)

SENIOR YEAR.

English (literature; composition; grammar; rhetoric) (4).

Business practice (2).

Physics or chemistry (5).

United States history and civil government (4).

Commercial law, 20 lessons.

History of commerce, 20 lessons.

Political economy, 30 lessons.

Social science, 30 lessons.

Elective.—Typewriting and stenography (8).

For a three-years' course this is fairly broad in scope, and aims to give students a conception of the possibilities as well as of the responsibilities of a business career. It is equivalent to three years' work in any other course, requiring, in fact, more hours per week than do the other courses. Moreover, it is adapted to any school and can be put in operation very easily. On one point I find myself quite faced about since this course was planned, and that is in regard to the typewriting and shorthand. In this course they are elective, and may be taken only by those whose

standings in all other studies are satisfactory. I now would have them obligatory, for they certainly tend to quicken thought, save time, improve spelling, and promote the power to read well.

But three years is not enough to lay the broad foundations of preparation that modern business life makes desirable. The course should be extended to four years, and no diploma should be given for anything less than a four-years' course. This would at once raise the commercial course to a position equal in dignity to the other courses, and would put a premium on scholarship and thoroness.

This four-years' course should offer electives in German, French, and possibly Spanish. Manual training and home science should be features of it and should be required of all. Elementary studies in industrial chemistry, transportation, banking and finance, office practice, observation of business methods, municipal government, and social science, should also be required, as well as a careful study of the neighborhood, be it city, village, or rural district, its history, natural advantages, business and other interests.

A commercial course thus enriched and extended in time would become what might reasonably be called a citizens' course, and it would very likely attract to itself before long all students who were not directly interested in preparing for college.

DISCUSSION

J. C. BENEDICT, superintendent of schools, Le Roy, N. Y. — Commercial education in the high school is only another step toward that ideal system wherein lies the efficiency of a government of the people, by the people, and for the people. The ideal high school will never come until those who have the power to regulate its courses of study fully realize the needs of the individual, and so arrange its courses that all who seek admission may find a training suited to their different needs and capacities. The present courses of study are not the twentieth-century courses. They do not meet the requirements of the masses today. The time of class education has passed, and we are confronted with a new problem — an educational demand which arises from the commercial age in which we are living, and one which calls for commercial training in the schools. This demand must be recognized. To this end, it is the plain duty of every municipality to give to each boy and girl an education that will not only make them better citizens, but one that will help them to achieve the greatest success in life. Our schools must offer courses of study which, while they are of a strictly educational character, shall have a bearing on their everyday life, and some direct relation to the work they are called to do in the world. They must provide teachers whose efforts shall be to help the pupils in the work they have chosen to do, and not to drive them thru work they have no desire to do. The pupil must be free to pursue such subjects as he and his parents find most helpful in their particular vocations. He must be taught industry and business methods, because it will be most beneficial for him, and not so educated that he will despise the work of the world because he cannot begin at the top.

There is as great a need of trained leaders in commerce and finance as in letters and art, and we must look to our public schools for much of this training. It is as much the

duty of the schools to teach commercial branches as it is to teach science and mathematics, or any of the classics. I maintain that pupils entering the high school should be allowed such choice of subjects as their time and tendencies direct. Why should the people who are supporting the public schools be compelled to send their boys and girls to private business schools to prepare them for the everyday duties of life? We must have free public schools in every city and village in the United States, where each pupil may frame his own course of study by choosing what branches he pleases, and for as many years as may suit his purpose and circumstances. These, I believe, will be the conditions in our public schools in the near future.

When we consider that the commercial life will absorb the greater majority of the pupils who enter our schools, I believe that it is the duty of our educational institutions to provide a training in the commercial transactions of the world. The need of this training is greater today than ever before in the history of our country. We are a great nation, and the problems which our young people will be called to solve will be different from those of any other century, and the work of our schools must therefore be different. They must prepare their students to enter the commercial field, and carry with them a knowledge of history and commerce, literature and art, applied sciences, and a certain proficiency in auditing and accounting. I am convinced, therefore, that it is the first duty of every high school so to educate its pupils that they may be able to earn a living, and, next, so to train them mentally, physically, and morally that they may, in addition to their equipment for self-support, be able to aid others, to lead them to higher ideals, nobler principles, and, lastly, to become leaders of men and builders of nations.

HENRY E. BROWN, head of commercial department, High School, Rock Island, Ill.—During the last few months we have all witnessed the graduation of a greater or less number of pupils from the various schools we represent, and I am sure you as well as I have been struck with the remarkable disparity between the number of boys and girls graduating. I am confident that the average is not far from three of the latter to one of the former. Why is it that so few boys ever complete the course of study laid down in our curricula? Is there something in the nature of the average boy that induces him to leave school at the age of fourteen? I am inclined to the opinion that the real underlying reason is that for years past and at the present time the high school has not and does not offer what the boy needs.

Invention has so changed our mode of life as to make rapid the growth of cities, demanding of individuals a more general knowledge of commercial matters. This evolution from rural to urban life has been so closely associated with ourselves that we have not realized what has happened. Our perspective has not been great enough. The business instincts of some men have, however, apprised them of this fact, and they have realized it sooner than the public-school educators. Therefore we see business colleges full to overflowing with boys, while the proportion of boys to girls in the high schools has been constantly decreasing. The fact that some 150,000 pupils are in attendance in the various business colleges of the country proves my contention, that the public schools must change with the changing conditions, or they must give way to something that will meet these conditions.

We must then introduce such courses in our public schools as will train for the business profession as the present courses have trained for the literary, medical, legal, and theological professions. At the same time we must remember that the schools should not be transformed into mere clerk factories. In remodeling our courses of study we should accept all that is good and essential of the general culture studies offered in the present courses, and add thereto what will tend to fit the pupils for actual business careers. The pupil should be taught thoroly and surely the essentials of business in its various forms. He should understand accounting and stenography, commercial law and commercial

geography, civics and economics. He should be taught the correct, careful, and accurate use of English, for the language of business is alive and pulsating with feeling. And he should be taught more than this, for the object of education is the training of character, the production of a fine race of men. Only those nations and peoples will make history who succeed in doing this.

This business education should be instituted no-less for the benefit of the pupil than for the benefit of the business itself, for if we succeed in educating a race of broad-minded and cultured business-men, we shall have proven ourselves worthy of our place in the field of education. If not, we had best not introduce these courses into the public schools.

WRITING IN THE GRADES BELOW THE HIGH SCHOOL WHEN THE COMMERCIAL BRANCHES ARE TAUGHT IN THE HIGH SCHOOL

J. F. BARNHART, SUPERVISOR OF WRITING, CITY SCHOOLS, AKRON, O.

A few years ago the special training needed to prepare young men and women for business was given exclusively by the business colleges. The public schools knew little about it and cared less; but times have changed, and today the majority of our leading schools have added the commercial branches to their courses of study.

In taking up the matter of commercial education, the public schools are called upon to solve new problems, one of which is the question of business penmanship. A good handwriting is now as ever one of the chief requisites of a business education. A graduate writing a Horace Greeley hand would find that, while the commercial studies had furnished excellent discipline for the mind, and while the knowledge gained was very valuable, they would aid him little more than Latin or Greek in securing a position in a business house.

The best-equipped commercial high schools and departments are endeavoring to meet the demands of the business world by giving training in writing, but with a course embracing such a large number of studies the demands upon the pupils' time are so great that the time available for practice in writing is somewhat limited. Considering the fact that the pupils have already had writing for eight years, it is fair to demand why they are not able to write well enough to take up the high-school work, and especially so since the adoption of a simplified style of penmanship.

The subject of this paper implies that the course of training in writing in the grades should be given with reference to the needs of the high school. While grammar schools do not turn out experts in any line, yet it seems to me that, if the time usually devoted to writing were spent in the proper way, it would be sufficient to establish such a writing habit as would enable pupils with only incidental attention to meet all the requirements in this direction of the high school or of the business world.

Pupils rarely, if ever, learn to write a good business hand, however, without professional training, and this the public schools must furnish, if they undertake commercial education. But are our grade teachers, principals, and superintendents as a rule sufficiently expert in writing to give this training? Examine the rolls of this great association and the hotel registers for a reply.

This expert training, then, must either be given in the grades, under the direction of a supervisor of writing, or later in the high school, by a special teacher. There is no escape from it. All attempts to turn out good business writers without thoro, systematic training have resulted in failure. In the interest of the child, in the interest of the writing, and in the interest of the other school work, this training should by all means be given in the grades. Why put a specialist in the high school to correct the bad habits which a supervisor in the grades could have prevented? Why devote extra time in the high school making up for wasted time and wasted energy in the grades, due to indifferent and haphazard instruction, when this time and energy could have been saved by a supervisor to direct the work in a systematic way? Why spend public funds for special training in writing to the few who enter the high school, while the many who are justly entitled to a good handwriting go out into the world with an indifferent style, when the same amount could just as well be expended for a supervisor whose services would benefit all of the pupils?

But some might say: We cannot give more time to writing in the grades, as we need all the time we can get for the "enriching studies." But I do not ask for more time. The trouble is not so much the amount as it is the kind of instruction. There is a tendency in some places, however, to cut down the time for writing, and in others to make writing a subordinate subject. This is a mistake. Writing must continue to receive its just share of attention. Business-men are demanding commercial training, and they will not look with favor on any neglect of penmanship.

Some of our school authorities have been led to think that, with copy-books, no supervisor is needed. Such an idea is fatal to the best results in writing. I believe in copy-books, but they have been so badly misused that some have denounced them as a curse. To substitute copy-books for a supervisor, with a view to saving money, is bad policy and worse economy.

Perhaps the greatest single boon that has come to the public schools in the last quarter of a century has been the introduction of vertical writing. It is the true standard for the schools and the best basis for good business penmanship. It is simpler, and therefore easier, to teach and easier to learn than the old slant system, and on this account some have made the mistake of depending too much upon the system. No system will produce good results without earnest, faithful, intelligent teaching.

Failure is therefore due either to unfavorable conditions or to indifferent instruction. Instead of improving the instruction, we hear of a reaction against the vertical in favor of a slant. The cause of the failure cannot be removed by tipping the writing over a little. One great objection to the vertical has been the tendency to backhand. This is only a symptom of poor teaching. It is largely due to bad penholding. There is no such tendency when the pupil is properly taught.

Another objection to vertical penmanship is that it is slow. Speed in writing is a matter of training, but, instead of giving the necessary training, some are searching for speed in slant, when they should remember that a few years ago the Spencerian system was denounced because it was so slow. Numerous tests have shown that greater speed has been developed with the vertical than was ever claimed for slant writing by the authors of rapid systems of slant writing. There is so much unreasonable prejudice against vertical writing that the utter folly of changing back to slant may not be seen for several years, but it will be seen in time. Not only are such schools making a serious mistake, but the business colleges are making a greater mistake in continuing to use the Spencerian system after it has been forever abandoned by the public schools in favor of vertical writing and high slant. The training necessary to make a good slant writer will make a better vertical writer, and no one can become a good business writer without the necessary practice. The public schools failed utterly to turn out good slant writers without it, and they will as surely fail with the new system. The solution of the problem, then, cannot be found in the system of writing, however superior, but it can be found in the system of instruction. Writing needs expert supervision just as much as either drawing, music, or physical culture; yet, while there are supervisors in most cities for those subjects, there are usually none for writing.

With a course of study in writing planned with reference to the needs of the schoolroom and to future demands, and with a competent supervisor to train the teachers and to direct the instruction, there will be system and uniformity thruout the schools, the time and energies of teachers and pupils will be economized, a desire for good writing will be created, interest and enthusiasm will be aroused and sustained, and the best possible results realized.

Without supervision, conditions can hardly be favorable for even fair results, judged from a commercial standpoint. The pupils in the grades usually pass thru the hands of at least eight teachers having different qualifications and different degrees of interest in the subject, and all writing different styles. One likes small, neat writing; the next, large and bold; one will write vertical, the next, slant; one will work for accuracy, the next for speed; one will build up, the next tear down; while none of them will know exactly where they are at or where they

are going. The pupils will copy the peculiarities from the writing of the various teachers, and this collection of freaks in the pupils' writing will be mistaken for individuality. There will be a sort of go-as-you-please plan on the part of the teachers which will result in a write-as-you-please style on the part of the pupils. Failure to get good results will be attributed to the system of writing instead of the system of instruction.

Considering the subject from every standpoint, then, I would say that schools undertaking commercial education should furnish the best instruction in writing possible in the grades. There are certain conditions, however, which make the acquisition of a good handwriting difficult even under the direction of a supervisor. Children are taught to write when too young to write properly, and they are required to do too much writing in the lower grades. Neither the slate pencil, lead pencil, nor the average penholder is adapted to the learner. They are therefore responsible for very bad habits, such as incorrect penholding, gripping, excessive finger action, and bad position. A large part of the teachers' time in the higher grades is devoted to the correction of these habits. A suitable penholder should be placed in the hands of the pupils after a year or two with crayon on blackboard or paper, and then used for all written work thruout the grades. Bad habits will thus be prevented, and by using but one instrument the pupils will become more expert in its use, there will be a decided gain in the quality of the writing, and the books and manuscripts will present a more businesslike appearance.

But I must say that of all subjects none will deteriorate faster than writing. Pupils often reach the high school with a fair style, but, owing to the utter lack of attention to the subject on the part of the high-school teachers, the writing soon becomes wretched. Teachers who would not allow a mispronounced word or an incorrect expression, and who would not permit pupils to enter the room in a careless manner, seem to think it beneath their dignity to insist on correct and businesslike penmanship. Such a state of affairs is not only absolutely inexcusable, but disgraceful. Pupils can take notes and can do all the writing required without scribbling. Let the teachers demand good writing, and they will get it. Teachers who excuse themselves by saying it is not their business to teach writing should be reminded that it certainly is not their business to *unteach writing*, or anything else taught in the grades.

After a number of years' experience in the grades, in the high school, in the business college, and in the normal school, I am led to believe that the interest of the pupils for whom the schools are established can best be served in the matter of writing by the plan suggested in this paper. If it meets with the approval of the commercial high schools and departments, they should urge its adoption. If pupils enter the high school deficient in writing, then a special teacher is a necessity; for if the commercial high schools and departments expect to do more for their pupils

than merely prepare them for a business-college course, then they must not neglect this subject of business writing.

DISCUSSION

F. F. MUSKUSH, supervisor of writing and drawing, public schools, Lakewood, O.—We are living in a commercial age full of opportunities for young people of both sexes, who are eager and impatient to grasp them, frequently encouraged by their parents, who, from motives of necessity or those of selfish gain, force their children to leave the schools to become wage-earners, to the detriment of skilled labor. This is a serious fact confronting the management of the public-school system. Since writing has become an important factor in the business world, whither the masses are tending, it demands its share of attention as well as the other branches of education. I dare say no part pertaining to the child's elementary education has been more thoroly discussed in recent years than the style of writing to be taught him. In fact, little remains to be said that would throw more light upon the teaching of this branch.

To know that the subject is one of interest to educators outside the penman's profession is gratifying to all who are striving directly to raise the standard of public-school writing to the highest possible point. The great interest manifested by the leaders of education regarding writing in the public schools goes to show conclusively that it is a very important factor in the groundwork of every child's education.

Judging from past experience as a teacher, I believe that any child possessing a fair degree of intelligence and perseverance can learn to execute a good style of writing. I am convinced that it is not so much the style taught as the methods employed in teaching the branch that causes so many poor writers among the public-school pupils. In the business world we find persons who write all the styles well. Every style has some good points, and every commercial student should be able to write the three leading styles easily and freely. For teaching a class of beginners, no style is superior to the round vertical letters. If writing is begun in the primary years, I would continue with the vertical as far as the fourth year.

There seems to be a difference of opinion among students of child nature as to the time to introduce writing. Some of the educators think it not wise to introduce the subject before the third or fourth year. I believe that children would do better and more thoro work in the later years of their school life if they were not forced so much in the primary and intermediate grades, and I am inclined to think they should do very little or no writing until they reach the fourth grade. During the primary years nothing more than the form or shape of the letters should be given them.

The practice drills should be taken up not later than the fifth year. These drills are very essential in acquiring a smooth, easy style of execution. Much of the public-school writing shows a lack of careful drill on movement. Nothing will destroy a cramped, slow manner of execution sooner than careful methodical movement drills, which should be chosen because of their application to the letter under consideration. These drills bring enthusiasm into the work necessary to secure the best results. They furnish the child with ideals and appeal to his æsthetic sense.

The writing of the public schools has been freely criticised by just and unjust critics. Among these critics are educators who do not know good writing when they see it, and others who never attempted to teach a class of small children. Some of them do not favor the teaching of writing beyond the first year of the child's school life, claiming it will be able to master the subject in that time. I have usually found those people fair examples of their theories. To decipher the meaning of their marks is a task neither pleasant nor desirable.

The opinion prevails with some that copy-books are the only things needed to make good writers. If properly used, they are helpful, but in many schools they are a needless expense. Copy-books furnish perfect forms to the child's eye, which tend to discourage him. He has never seen his teacher write so beautifully, and wonders if the copies are real when his teacher admits they are printed ones. His sense of justice is insulted, and his attempts usually end in failure and disgust. What we need is more real, live, energetic teachers who can set copies for their pupils. Children love to look at nice writing, especially if done by their teacher. In large school systems copy-books may prove their usefulness, if properly used. The cause of much slow, poor writing in the public school is a decided lack of interest shown by the grade teachers.

Should we blame the teachers for slighting their work at times, when we stop to consider what they are expected to do every week of the school year? Look at the present curriculum of the public schools! Is there not a stupendous amount of work to be accomplished during the four or five hours' time allotted to a school day? Give the primary teachers an opportunity to lay the foundation well, then the building may be as extensive as the builders may desire.

How many words should the eighth-year pupil be able to write per minute? This question is difficult to answer. Some teachers expect forty or more, others are satisfied with fifteen words per minute. I am satisfied with pupils doing work averaging twenty-five words a minute. Business-men as a usual thing are not rapid writers; few of them average a speed of forty words. Is it fair to expect the child to equal the adult of constant practice?

In conclusion, permit me to say that I am convinced that poor writing is not the result of styles or systems, but is directly due to false ideas of teaching. Supervisors should meet with their teachers frequently and outline their work by example, so that their teachers will understand how to teach as their supervisor desires. Thirty minutes spent in a room once a year by the supervisor is no inspiration to pupils or teachers.

THE PHONOGRAPH AS AN AID IN TEACHING SHORTHAND

THEODORE F. LAKE, TEACHER OF PHONOGRAPHY, COMMERCIAL HIGH
SCHOOL, BROOKLYN, N. Y.

We live in an intensely mechanical-practical age. Wherever human ingenuity can be applied to lighten human labor, it has been done. From the improved tool of the farmer to the automobile of the millionaire, inventive genius has invaded every conceivable avenue for lightening labor and promoting comfort. Up to a short time ago, however, the sentiment has generally prevailed that, with the exception of the time-honored ferule, the teacher's profession has not been open to mechanical invasion. True, there are machines in the profession; you and I work side by side with them every day; but these have been generally looked upon as due to other causes than human ingenuity. But why should not a teacher employ machinery, or any other motive power, so long as he obtains as good or better results, and that without the sacrifice of nerve tissue and brain-cells? Already the largest school of correspondence in this country has taken up the use of the phonographic record as a means

of teaching foreign languages. It is not a fad with them. It is a means of meeting certain conditions that cannot be met in any other way.

While I believe the Commercial High School of Brooklyn, N. Y., is a pioneer in the use of the concert phonograph as a means of class dictation, still it is our desire to disclaim all tendency toward faddism. The innovation there was nothing more than a necessary step brought about by existing conditions. With several hundred boys to recite in shorthand each day, and with periods of forty-five minutes each, we have the problem which confronts us, how to make the greatest possible use of the forty-five minutes.

The time of shorthand study may be logically divided into three periods: the period during which the principles of the system are being acquired, the vocabulary period, and the period of dictation. During the late vocabulary period, or after the student has mastered the principles of his system and is ready to apply them, we usually devote ten to fifteen minutes at the opening of each recitation to a review of these principles, using carefully prepared lists of words for the purpose, and giving as much time as possible to individual needs. The remaining thirty or thirty-five minutes is then given over to dictation. I need not tell you that it is during this period of early dictation, while the pupil is making his first application of the principles, that his need of individual attention is most urgent. And you cry out in your despair: "Oh, for someone to do this mechanical work and give me opportunity to help the boys — to pass among them as they work, criticise them, offer a suggestion here, a hint there, or a word of commendation or encouragement!"

Individual instruction has been the slogan of the theoretical pedagog from time immemorial. But in the public schools, where overcrowded conditions prevail and large classes are the rule, the teacher despairs of ever solving it.

These rambling introductory remarks have not been delivered with a view of impressing you with any profound learning on the subject or any philosophical presentation of it, but merely to confirm your suspicion and mine that relief should come from some quarter. I will tell you where I found mine. While passing a phonograph exchange on Bedford avenue in Brooklyn, one morning something over a year ago, I heard one of Mr. Edison's concert phonographs delivering the words of Lincoln's Gettysburg address, and the thought came to me: Why not employ it as teacher No. 2. For the paltry sum of \$75 and a certain amount of diplomacy, we persuaded the phonograph man to transfer title to us. Teacher No. 2 was taken to our class-room, the record made, the horn turned on a class of sixty boys, and to our infinite delight we witnessed the students take the dictation quite as readily as they ever took it from me.

What is the result? The machine relieves me of an immense amount

of purely mechanical work, and I am at liberty to pass among the students and bestow such individual instruction or assistance as they may need. The speed may be regulated as I desire by a simple turn of a lever, and, perhaps most important of all, the dictation is mechanically uniform. As you well know, even in the case of the experienced dictator, it is the instinctive tendency to pause after each new or difficult word or outline, thus cultivating in the student a halting, hesitating style, and robbing him of the ability to attack and record new and difficult outlines without serious loss of time. Then, too, for the simple pressing of a button, you have at your command the material for endless repetition. To be sure, the pupil must be perfectly grounded in the principles of his system; and this repetition must be administered in such disguise and in such discreet doses as not to become monotonous and be productive of mind-wandering. But, no matter what the conditions, repetition in shorthand we must have until each new word or combination of words slips thru its beaten track of brain-cells, and the fingers move involuntarily to the sound. I know of no better means of gaining this repetition without the sacrifice of lungs and precious nerve-cells than the phonograph.

I am about to open a recitation. After a few minutes devoted to a thoro review of the principles, the cylinder upon which our last dictation exercise is recorded is then placed upon the machine; so that at the very beginning of the general dictation work speed practice may be introduced. Bear in mind, however, that the matter which the machine is about to reproduce has been thoroly mastered at a preceding lesson. The machine may now be set in motion at a speed easily within reach of the class, and during the time devoted to this part of the lesson the speed may be almost imperceptibly increased, until at the end of the exercise the student has gained a number of words per minute.

The class is now ready to take up the work of the advanced lesson, and here I find another device serves my purpose admirably. On hard, well-sized paper the advance lesson may be traced in correct shorthand, using hectograph ink. By then using the hectograph something like one hundred excellent copies may be made for class use. Armed with as many copies as you have students, you take up the third division of your class work. Passing a sheet to each pupil, you require him to read or transcribe the shorthand notes. This done, you require him to pick out each new and difficult character and phrase and familiarize himself with it. You are now ready for dictation. You have a record of the hectograph matter, and, setting your machine at a rate of speed easily within reach of all, you conclude your recitation, preserving your record, however, for your speed work on the morrow.

Many of our boys, on coming out of the school, wish to prepare themselves for the civil service, and particularly for the court-reporting branch.

I find that an almost perfect reproduction of the attorney examining the witness may be obtained by means of the machine.

And now a few hints as to the machine itself, and I am done. The apparatus complete will cost you seventy-five dollars, and twenty-five blank cylinders ten dollars more. But here your expense practically ceases, for each cylinder may be shaved from one to two hundred times, thus giving you several thousand records.

If your class is small and you do not care to use the large horn, which in reality distorts the sound, you may place your machine at the head of a long table or series of tables, the length of which you extend half-inch rubber tubing. From this main rubber tube branch tubes may be run with receivers to the ear of each student. By this means you have an almost noiseless dictation period, and practically the same result is obtained; altho the horn dictation is nearer the actual condition of the class dictation. The great trouble with the phonograph, as used in the office, has been that you cannot dictate and shave the record at the same time. But in its use in the schoolroom this objection has little weight, for the amount of matter used in a day is small when compared to that of an office, and it is an easy matter to have your pupils shave the cylinders for you as often as you desire.

Your greatest trouble at first will be in the making of your records. We little realize what defects in enunciation we have until we hear our words hurled back at us from a brass horn. But these defects you will soon learn to overcome, and with a little patience and a proper enthusiasm you are bound to succeed, and will undoubtedly find the phonograph a great aid in teaching shorthand.

DEPARTMENT OF PHYSICAL EDUCATION

SECRETARY'S MINUTES

FIRST SESSION.—WEDNESDAY, JULY 10, 1901

The meeting was called to order in the Light Guard Armory, at 2:30 P. M., by Dr. W. O. Krohn, Chicago, the president.

After a solo by Miss Tekla Farm, of Detroit, the address by the president, on "Physical Training as Corrective of Brain-Disorderliness," was given.

Following this came a paper by Miss Nina B. Lamkin, Kelso School, Chicago, on "Physical Exercises for the Average School."

After another vocal solo by Miss Farm, a paper written by Mrs. Frances W. Leiter, of Mansfield, O., was read by Miss Charlotte Carne, directress of physical training, public schools of Detroit. The subject was "Legislation—Why Needed."

"Physical Training and the American Teacher" was then given by Hans Ballin, supervisor of physical training, Little Rock, Ark. H. E. Kratz, superintendent of schools, Sioux City, Ia., led in the discussion of Professor Ballin's paper, followed by Mrs. Louise Preece, of Minneapolis, and Professor Ziegler, of Cincinnati.

The president appointed as nominating committee:

Dr. Augusta Requa, New York city. Hans Ballin, Little Rock, Ark.
Theodore Toepel, Atlanta, Ga.

SECOND SESSION.—THURSDAY, JULY 11

The meeting was called to order at 2:30 P. M. by the president, Dr. W. O. Krohn, who spoke regarding physical training and the work done by the turners of America.

The remainder of the afternoon was devoted to the following exhibition given by the turners of Detroit, under the able direction of Berthold Seiffert:

PROGRAM

PART I

Overture, by the Great Western Orchestra.

1. Calisthenic exercises, girls and boys from 6 to 12 years of age.
2. Wand exercises, boys from 12 to 14 years of age.
3. Climbing and high jumping, boys from 6 to 12 years of age.
4. Hoop exercises, girls from 10 to 12 years of age.
5. Class work on three horses, boys from 12 to 14 years of age.
6. Class work on swinging ladder and rings, girls from 12 to 14 years of age.

PART II

Selection, by the Great Western Orchestra.

7. Athletic games, girls and boys from 6 to 12 years of age.
8. Dumb-bell exercises, boys from 14 to 18 years of age.
9. Indian club and wand exercises, young ladies and men of Detroit S. T.-V.
10. Class work on four double bars with pyramids, boys from 14 to 18 years of age.
11. Dancing roundel, girls from 12 to 14 years of age.
12. Apparatus work and fencing, young men of the Detroit S. T.-V.

The Committee on Nominations reported the following:

For *President*—Dr. W. O. Krohn, Chicago, Ill.

For *Vice-President*—Theodore Toepel, Atlanta, Ga.

For *Second Vice-President*—Dr. Augusta Requa, New York city.

For *Secretary*—Mabel L. Pray, Toledo, O.

The report was unanimously adopted, and the department adjourned.

MABEL L. PRAY, *Secretary*.

PAPERS AND DISCUSSIONS

PRESIDENT'S ADDRESS—PHYSICAL TRAINING AS CORRECTIVE OF BRAIN-DISORDERLINESS

DR. W. O. KROHN, CHICAGO, ILL.

I. All learning is by means of association of ideas. The successful teacher associates new impressions with preceding experiences. Each new sensation, each new idea, is interpreted by the pupil in the light of his previous experiences. The teacher helps the child in his endeavor to learn, by making possible certain definite associations that are logically bound to lead to conclusions that are just as certain and just as definite. In this process there is the best possible exercise of the child's faculties—his memory, his imagination, his judgment, his powers of comparison, his reasoning.

The clearness of perception and the comprehensiveness of the pupil's mental grasp depend on the distinctness of possible association of ideas in the subject-matter presented by the teacher in each individual lesson. This distinctness and clearness depend on three things:

1. The vividness with which they are presented. As an illustration of what I mean by vividness, I might refer to the oft-quoted illustration of Lange's:

If the teacher is to explain the distance of the sun from the earth, let him ask: "If anyone in the sun fired off a cannon straight at you, what would you do?" "Get out of the way," would be the answer. "No need of that," the teacher might reply. "You may quietly go to sleep in your room and get up again; you may wait until your confirmation day; you may learn a trade, and grow as old as I am—then only can a cannon ball be getting near; then you may jump to one side. See, so great is the sun's distance."

2. The frequency with which two or more ideas are presented facilitates their likelihood of recall by means of association.

3. The presence of rival ideas or perceptions militates against the desired association of impressions and retards mental activity in its various forms of expression. It is this presence of rival ideas that robs the teacher of the pupil's attention and makes instruction well-nigh impossible.

II. Turning from these foundation principles of practical psychology as applied to pedagogy, let us consider briefly what is meant by brain-disorderliness. The defect in such a child is central, i. e., within the brain itself. His senses may act with integrity. He sees well, hears perfectly; taste, smell, tactile, and other senses are normal. The impressions from his organs of sense are conveyed to the brain at the normal rate, and in the same way as in the bright, well-poised child.

The avenues of expression in the brain-disorderly child may be normal in every respect. His eyes, his arm muscles as used in gesture, his speech, tell the story of his thoughts, such as he has, with integrity and with clearness. If there is nothing wrong with his avenues of sense or with his avenues of expression, where is the difficulty? Within the brain itself. But where in the brain? In the fibers that go to make up and define the paths of association.

You recall from your study of anatomy that there are countless thousands of nerve fibers within the brain mass that connect each brain center with every other brain center. In the brain-disorderly child the associations of ideas are so poorly made, or made in so haphazard a way, that the paths are not definite, clear, and distinct.

III. Physical education thru appropriate, well-advised, regular, systematic effort determines paths of expression in such a perfect way as to relieve the brain of tendencies to disorderly action. The child is made to see clearly the action to be performed. He performs it with earnest effort and eager interest. Definite paths of association are formed. Each succeeding brain or mental activity is helped thereby. I have seen many cases of seemingly incurable brain-disorderliness thus cured by judicious physical training.

PHYSICAL EDUCATION LEGISLATION—ITS NEEDS

MRS. FRANCES W. LEITER, SUPERINTENDENT OF DEPARTMENT OF PHYSICAL EDUCATION, NATIONAL WOMAN'S CHRISTIAN TEMPERANCE UNION, MANSFIELD, O.

The following statements can be made before such a session as this without involving discussion or controversy:

1. Physical education is not a branch of study, but one of the three great departments in education.
2. It aims to secure health by the free circulation of good blood in all parts of the body, thru systematic exercise.
3. It seeks the most complete development possible of all organs, and all parts of the body.
4. It disciplines the body thru exercise, just as the mind is disciplined by mental exercise.
5. It establishes better brain and nerve, as well as muscular, tissue, which builds for maximum mental achievements. This means better scholarship during the school period, and greater success later in life, where intelligence is essential.
6. It increases and strengthens will-power, the keystone of human character and efficiency.

With such premises as these, we can easily conclude that such education is essential to each and every child, girl as well as boy, in rural districts as well as in towns and cities. In fact, it should unquestionably be an

established part of the curriculum of our public schools. Mental proficiency without physical fitness is only half preparation for life. Experience has demonstrated that even less mental endowment with more reliable physical basis and vigor insures greater success.

Forty years ago the educators of the country, assembled at Buffalo, declared by resolution that physical discipline should not only be incorporated in the public schools, but should be required by law. These forty intervening years, under the increasing demands and exhausting conditions of modern civilized life, have made the necessity seem all the more apparent; and yet ten years ago this important subject was only beginning to gain a hold on educators, while the public at large today fails to appreciate this great lack in our school system.

It is a mistaken idea, which generally prevails, that this phase of education is already established in the schools. In the large cities and some favored towns this is the case; but it scarcely provides for one-fourth of the children attending the public schools. Even in these favored cities and towns it is at the mercy of changing boards of education and the whims of communities, which may at any time decry it as an educational measure. Spring elections have been known to upset finely developed plans along this line in the schools. The representative American board of education does not always represent the average intelligence of the community.

So long as this remains the case, and so important a matter continues wholly in the hands of boards of education to provide for or reject, as the case may be, we cannot hope for permanent and efficient physical training in our schools.

To put this matter beyond the contingencies of spring elections and the fluctuating judgment of boards of education, a law should be placed upon the statute books of each state making physical education, not permissive, but compulsory in all grades and classes of schools under public control.

Some educators object to the provision which makes the school law compulsory, viz., the penalty. The penalty will never concern a law-abiding educator; but it should exist to protect so important a subject from the results of delinquency on the part of school officials and indifference on the part of teachers. We have been told by one prominent educator that the school law providing for reading, writing, and arithmetic does not include a penalty. For good reasons this is true. The enforcement of these requirements takes care of itself. These primary branches are fundamental. Upon them all education rests. It is absolutely impossible to advance in the school curriculum without knowledge of these fundamental branches. Physical education is not fundamental, at least not in the same sense. More fittingly do we call it vital, rather than fundamental; and yet we see that education, one phase of it at

least, may progress with what we choose to call a vital phase neglected. Results, however, are deplorably one-sided. Some circumstances have hindered the progress of this feature in our schools:

1. The school curriculum is already overcrowded. There is no time, it is claimed, to get in the needed fifteen or twenty minutes.
2. Lack of harmony between various systems of physical education.
3. The demand for extra expense in articulating this department of training with the schools.

In reply we claim:

1. Added power to concentrate the mind when at mental work, with more perfect control of self thru physical discipline, will permit time to be gained and better work to be accomplished in the schoolroom.

2. We are beginning to see that lack of harmony among physical educators, if it exists to any great extent today, is not so much conflict between systems as antagonism between individuals, which will eventually correct itself as the work is more generally established in the schools.

3. Competent specialists are needed, and the great army of teachers who preside in the schoolroom must be educated to conduct the daily work. It has, thus far, been the aim of attempted legislation to secure, for the immediate future, the best possible results with the least financial outlay. Physical education is a feature of pedagogy which cannot be acquired nor taught thru the medium of text-books, as science, history, literature, etc., are acquired and taught. It needs the thoro knowledge of, and discipline in, practical method on the part of the teacher. To accomplish this, there must be able specialists employed as instructors. Educators have devoted their first thought and energy to securing the best methods for mental progress on the part of the child, while the physical need has been woefully neglected. So occupied have they become in the application of these methods that it has been left to reformers to inaugurate and carry forward plans which will provide systematically for the best possible physical conditions in rising generations. It came as an inspiration to the great philanthropist, Frances E. Willard, that when this American people can have healthier, better-disciplined bodies, there will be less demand for narcotics as medicine. It is not alone at the hotel bar, nor at the grog shop, that drunkards are started. The prescription of the physician, the enormous list and quantity of patent medicines used, have much to account for in the progress of drunkard-making. In 1890 the National Woman's Christian Temperance Union created the department of physical education, of which department the writer has been superintendent since the beginning. It has been a work requiring patience and perseverance to secure suitable literature with which to educate the people at large as to the necessity for systematic physical training in our schools. Thousands of letters and many articles for the press have been

written and sent out over the country, paving the way for compulsory legislation in the states.

In 1892, thru the influence of the German turners, Ohio enacted a law providing physical training in cities of 5,000 inhabitants and over. While this resulted in some progress, the absence of enforcing provisions caused the law to fall short of the success desired. A little later Louisiana added physical training to required work in the schools, and to some extent the law has been enforced in that state. South Dakota made legislative effort without success. North Dakota, by enactment, provided this instruction for all pupils in all schools under public control. In the absence of penalty this law is practically permissive only.

In 1892 a bill, the counterpart of the Ohio law, passed both branches of the general assembly of Pennsylvania, but was vetoed by the governor. Twice since the Woman's Christian Temperance Union of that state was instrumental in having a bill introduced in the legislature of New York state, but the outcome was not successful. Last year a partially successful law was enacted and is a good forerunner of what may follow.

It remained for Ohio, in 1890, to make the most systematic effort for an amended law. While the campaign was conducted by the National Woman's Christian Temperance Union, it was under the auspices of the Ohio Temperance and Physical Education Union, with an advisory council of twenty-two members, composed of the presidents of six of the leading universities and colleges, the presidents of thirteen well-known state organizations, and several influential men of national reputation, living in the state.

The bill was ably championed in the senate by Hon. Carl Nippert, of Cincinnati. Without a word of discussion, it passed that body unanimously, but failed to reach the house calendar in time for consideration before adjournment. The judgment prevailed among those acquainted with the sentiment in the lower branch that the bill would have become law had it reached consideration.

The main provisions in the bill were as follows :

Sec. 1 provided for physical education in all grades and classes of schools and educational institutions.

Sec. 2 placed responsibility of the enforcement on boards of education and boards of educational institutions.

Sec. 3 required at least ten lessons and drills for all teachers in each and every county, this instruction to be given at teachers' institutes, unless otherwise more satisfactorily provided for. A sum not exceeding \$200 was allowed each county for securing a competent specialist as instructor at institutes.

Sec. 4 authorized cities and other districts to make special provision for this instruction, thereby excusing teachers of said communities from the requirement at the annual institute session.

Sec. 5 pertained to the qualification of physical educators who should serve as instructors at institutes and as supervisors in the schools.

Sec. 6 provided for the establishment of this department of education in all normal schools or schools of methods hereafter devoted to the training of teachers under the state.

Sec. 7 placed a penalty of \$25 upon any responsible officer who failed to carry out the requirements of the law.

The advance of public sentiment in the Ohio general assembly on the subject of physical education was remarkable. The bill was received with favor in some directions not expected, particularly by members from rural districts. We hope to have the Nippert bill introduced at the coming session of the Ohio general assembly.

One pertinent, practical question arose among several members of the general assembly who were experienced educators, viz.: In case such a law is enacted, are there sufficient educated specialists to supply the demand? To this we readily responded: "Such demand will soon create the needed supply."

We are aware that some have objected to compulsory legislation until there is at hand a sufficient number of specialists to supply the needed demand. Thirty can readily meet the requirements at institutes in eighty-eight Ohio counties during the institute period in case the law is secured. When the field is fully established, many experienced educators will be ready to enter normal schools to prepare for this service.

I am well aware that here today are some who, having spent years in preparation and in gaining experience, will not appreciate the plan of ten yearly lessons for teachers who are wholly without previous physical discipline. To this I reply: We do not wait until the state is flooded with experienced grammarians and arithmeticians before sending teachers to the district school. The fact is, teachers are employed too many times who are barely able to secure certificates in the primary branches. If this seems a necessity in mental work, we think it is possible to accomplish something in physical education under similar circumstances, since it is the best that can be done.

All depends upon giving inexperienced teachers the best instructors our various training schools of physical education can produce. After only ten lessons of the kind referred to, even the untutored girl will be able to go to the schoolroom for the first time, and before a term closes change, in many instances, the physical trend of rural students of unfortunate physical habits. To know how to stand, sit, walk, and breathe properly, with some of the simplest exercises for various parts of the body, may give to the country boy or girl new conceptions of what physical efficiency means, and of its bearing upon success in life.

The department of physical education under the Woman's Christian Temperance Union indorses no special system to the exclusion of others. Foundation principles are advocated upon which all systems build.

In the work of securing laws in the states we earnestly ask the co-operation of all physical educators. To you, as specialists, we must

largely look for support in an effort which requires influence from the educational field.

One efficient law will open the way for similar work in other states and give great impetus to normal schools, upon which we must depend for educated specialists.

THE ETHICAL, PHYSIOLOGICAL, AND PSYCHOLOGICAL ASPECT OF PHYSICAL TRAINING

HANS BALLIN, SUPERVISOR OF PHYSICAL TRAINING, LITTLE ROCK, ARK.

"Physical training" is the term broadly applied to that part of the science of education which deals with man physically. The popular belief that bodily exercises influence only the physical man, his blood, muscles, and sinews, has been proved fallacious by the researches of physiology and psychology. These sciences have shown beyond a doubt that any exercise, or movement of the body, is a direct or indirect action of the mind also.

If this educational truth were thoroly understood, we should encounter fewer mistakes in teaching. What Pestalozzi surmised, Froebel felt, and Herbart endeavored to expound, modern sciences have made perfectly clear: all knowledge comes thru our senses. To train these, to make them recipients of all impressions, and to fit the channels of intercourse between mind and body for easy and prompt action is the object of physical training.

From this exalted standpoint, physical training takes an indispensable place in the school curriculum of every schoolroom in the land. It is as important in rural districts as in the most populated parts of our large cities.

A heritage of evils that man was piously wont to submit to has been removed by sanitary measures, the benefits of which are hardly realized. The oriental view of the relationship of soul and body which found its climax in the acts of the flagellants is in contradiction to evolutionary thought. Instead of looking for morals in affliction, we today strive for morality thru health. If it is a moral obligation for the individual to care for his body and make and keep it healthy, it is the same for society wherever the care of individuals becomes its duty, as in the public school.

In ancient Hellas the vying to form the human body beautiful was as much an ethical endeavor of the individual as it was a matter of state. Human beauty of form was recognized and admired as the highest type in all nature. Thru the ceaseless practice of gymnastics the Hellenes not only achieved the most beautiful bodies, but reached a more exalted position in art than has ever been attained by any other race.

Hand in hand with the achievement in this ethical field, the Hellenes manifested their intellectual superiority. Posterity has perverted the Grecian conception of mind and body.

There are many sayings, and still more acts, which once led to the belief that to subdue the flesh was to sanctify the spirit, and also that man should not take pride in the appearance of his body. "Forasmuch then as Christ hath suffered for us in the flesh, arm yourself likewise with the same mind, for he that hath suffered in the flesh hath ceased from sin." While, on the one hand, the Grecian youth took pride in his healthy skin of red hue, which characterized him as a civilized man as distinguished from the "barbarian" of white skin, on the other hand, the hermit saint exposed his filthy and wounded body to the burning sun and gnawing vermin for the glorification of God. To eradicate this conception of our duty to our body is the ethical task of physical training. Let us become thoro believers in the truth that each man can do much to make himself healthier and more beautiful, and that it is a moral duty which he owes society, as it is the duty of society to foster beauty and health in its public schools.

After enumerating what he has observed of the activities of the child, Froebel asks and reasons :

But has this instinct for play no deeper significance? Is it appointed by the Supreme Being merely to fill up time — merely to form an occasion for fruitless exercise — merely to end in itself? No! I see now that it is the constituted means for the unfolding of all the child's powers. It is through play that he learns the use of his limbs, of all his bodily organs, and with this use gains health and strength. Through play he comes to know the external world, the physical qualities of the objects which surround him, their motion, action and reaction upon each other, and the relation of these phenomena to himself; a knowledge which forms the basis of that which will be his permanent stock for life. Through play, involving associatship and combined action, he begins to recognize moral relations, to feel that he cannot live for himself alone, that he is a member of a community, whose rights he must acknowledge if his own are to be acknowledged. In and through play, moreover, he learns to contrive means for securing his ends; to invent, construct, discover, investigate; to bring by imagination the remote near; and, further, to translate the language of facts into the language of words; to learn the conventionalities of his mother-tongue. Play, then, I see, is the means by which the entire being of the child develops and grows into power, and therefore does not end in itself. Play is the natural, the appropriate business and occupation of the child left to his own resources. The child that does not play is not a perfect child. He wants something — sense, organ, limb, or generally what we imply by the term "health" — to make up our ideal of a child. The healthy child plays — plays continually — cannot but play.

It is upon this understanding of the nature of the child that Froebel founded the kindergarten. This institution should be the connecting link of the nursery and real life; should, by directing play, bring the child in contact with the realities of the world. Not stunting, but rather fostering, this natural inclination of the child, the kindergarten should enhance the opportunities for sense-impressions. Thus guided the child

should enter school. But the kindergarten is by no means within reach of all children of the land—the public school is. Does the public school realize the great philosopher's ideal? Does it lead the child thru play acts to investigate, invent, construct, and discover? There is no intermediate step from the cozy mother's lap to the hard school seat. Is it possible that our schools can ignore the child's nature so entirely with impunity when it expects the child of six years to behave in school as the young person of the high schools? This is done, however, and if this charge cannot be laid at the door of a goodly number of first primary teachers, there are so many of whom it can be said as to make it rather the rule than the exception.

Modern physiology has rendered immeasurable service to pedagogy by its investigation of the growth of the human body. The folly of the past in considering the child a storehouse into which knowledge and power could be introduced at any time, if only proper methods be used, has done much harm. The feat of Basedow, who taught his child to speak Latin at six years, is as monstrous as the endeavor to make athletes of children of the same age. Physiology has taught us that each period of a child's growth has its fixed time, that certain parts of the body have their time of greatest development, and that these are not varied materially except in abnormal children. Thus the muscles grow stronger from the center of the body to the extremity; the heart and lungs have their greatest development during the years of adolescence. Not only should we not interfere with the growth of these organs by overtaxing them during the period of their growth, but we must be cognizant of the fact of the close connection of the body and the brain. An undeveloped muscle of the finger has an undeveloped nerve-center in the brain, and *vice versa*. An organ of the body which at any period of growth develops faster needs a larger supply of nourishing material—blood. The blood taken away for other work of exertion—mental work, for instance—interferes with the very important growth of these precious organs. It is approximately in the years of adolescence that these organs grow faster, all out of proportion with their former development, and these are also the years that the public schools are making heavy demands for the mental work of the children. Many earnest thinkers have attributed the apathy of girls between thirteen and sixteen years, and of boys between fourteen and eighteen years, for school at this time to the disregard of these physiological phenomena. Physical training must, if it wishes to lay any claim to rationality, consider them and so arrange the materials of its system as to help during the different periods of growth.

The different ages and the periods of growth of the child require such exercises as will be beneficial at that time of life. These movements must have physiological effects upon the whole body and upon its many parts, which are conducive to their perfect development. Training, then,

is not a hastening process, but a judicious treatment of the present forces in the child. Why should it be otherwise with the human body than with all other living and growing creations? There never was a rose before the bud.

The physiological effects of exercise must be known; the requirements for each period of life must be known. Then enters a third factor of no less importance: the psychological effects of exercise must be known. With the knowledge of development of the muscles we are enabled to say if the mind is capable of executing a certain exercise. From the fact that the muscles of the fingers, for instance, are the last muscles that reach full growth, we can understand the difficulty which children before the age of seven years have in executing movements with them, and we can understand the cramped position of their fingers and hand when obliged to hold the pen or pencil in a prescribed way. From the time that the child lies in the cradle the education for co-operative work of mind and body begins.

"We begin to cultivate the co-ordinating activity from the very beginning of our existence. The small child gropes along in an uncertain way when it wishes to reach a desired object, and only after many attempts does it succeed. Gradually, however, it becomes familiar with this often-repeated co-ordinated motion, until at last it has thoroughly mastered it. The child has gradually learned to get hold of an object placed within its reach, if it wishes to do so, and has learned to do so quickly and safely, and without any waste of energy whatever. In a similar manner, after many wearisome attempts, the child learns to walk, run, jump, etc., in short, it brings a number of well-known forms of motion, with which the co-ordinating action of the will is familiar, to school with it; and on this foundation physical training bases its work."

Physical training is not, as has often been represented, for utilitarian purposes. Its office is not to prepare the child for military service, the stage, and the like. It is simply one of those formative agencies in education whose ultimate aim is consistent with that of education itself. Physical training should lay the groundwork upon which all higher and nobler activities of the mind and body may build. Thus it should give to the mind its strength to work with intensity; to the body the ability to train for the nobler arts. Manual training must have physical training for its preparatory school; drawing, painting, sculpture, singing, and stage-acting must find their groundwork in physical training.

Will the American people recognize the importance of physical training to its full extent by making it an indispensable part of youth education? Let us quote a few who love their country well. Frederick Treves says in his *Physical Education*:

The great elements in human progress afford, indeed, proper material for admiration. There is no one but would admit that the advantages of the civilized man over the savage are such as to make reasonable comparisons scarcely possible; but there follows upon this the question as to whether the so-called blessings of civilization represent an unmixed good. The intellectual victory has been great, but it has not been effected without cost. We have in our midst the inventor, the man of genius, the handicraftsman, but

we have also the weakling, the delicate, the misshapen, and that most modern product of all, the manikin of the city. This pale, wizened, undersized creature represents no little sacrifice; he is a product of civilization, an unintentional manifestation, but a characteristic one.

Herbert Spencer wrote forty years ago :

Perhaps nothing will so hasten the time when body and mind will be adequately cared for as a diffusion of the belief that the preservation of health is a duty. Few seem conscious that there is such a thing as physical morality. The fact is that all breaches of the laws of health are physical sins. When this is generally seen, and perhaps not until then, will the physical training of the young receive all the attention it deserves.

Dr. E. Seguin, United States commissioner at the Vienna Exhibition, closes his remarkable report with these prophetic and true words :

There never was a people so master, and conscious altogether, of its own destinies as the American people; therefore, none who needed more to educate its own flesh, bones, and sinews to obey its own will, and to bear its synergies toward this future. Anybody conscious of this ideal ceases to see education by any other light; that is the criterion. With it as a guide, we see what the American school must be. Beginning and ending in the folds of woman's affection and tact, education takes the child from her lap to the kindergarten, thence to the physiological school. There, all to be trained in their senses, in order to treasure, without distortion, the cosmos in their microcosmos. There, again, all to be trained in the use of their hands, to create in the world of ideals their concepts of what it is good for them to do as their part of the co-operative improvements of our society and planet. Thence to direct apprenticeship, or to special schools of art, of technology, etc. Thence to the wide world, in the climate and with the mate who suits them best, and promises children better than themselves.

DISCUSSION

H. E. KRATZ, superintendent of schools, Sioux City, Ia.—The field of discussion provided in this topic is so vast as to preclude its thoro discussion. The paper has, in the main, covered the ground well, and is worthy of high commendation. I am in hearty sympathy with the views set forth in the paper as a whole, but there are a few features in the discussion which impress me as indicating overemphasis of the results of physical training, or as making too broad claims for this important line of education.

In discussing the ethical, physiological, and psychological results of physical training the author of the paper, in contrast to the unwise practice of the flagellants, presents the opposite practice of the Greeks after this manner: "Thru the ceaseless practice of gymnastics, the Hellenes not only achieved the most beautiful bodies, but reached a more exalted position in art than has ever been attained by any other race."

Is not this an unwarrantable assumption? I am a great believer in the ethical, physiological, and psychological advantages to be derived from wise physical training, but am not ready to assume that the Greeks hold their pre-eminence in sculpture simply or chiefly because they practiced gymnastics unceasingly. That they developed among themselves the most beautiful bodies, practically attained physical perfection, thru their games and ceaseless practice of gymnastics, is entirely credible. That they even developed in this manner their keen appreciation of the beautiful in human form, and thus laid the foundation for their supremacy in the realm of sculpture, may also be admitted; but that to this physical training should be due that incomparable shining forth of the soul thru the cold marble which constitutes the supreme charm and excellence of Greek sculpture cannot be successfully maintained.

That divine appreciation of soul qualities and skill to embody them in lifeless marble are not developed simply by striving after physical perfection. That which constitutes the chief charm of life, that which makes life worth living, springs out of the proper training and development of the intellectual and spiritual. Greek education had in it provisions for the development of that wonderful intellectual life which will always remain its greatest glory. That their ceaseless practice of gymnastics contributed somewhat to the attainment of this intellectual superiority, thru the development of healthier and stronger bodies, needs no argument. That it also provided a better body, a clearer brain, a more perfect instrument for the mind to use, and established closer and more harmonious relations between mind and body, can be promptly accepted; but that it was the chief factor in the development of their intellectual superiority is pressing the argument too far, and is likely to produce a reaction.

As one who believes very strongly in physical training in our public schools, and particularly in a larger introduction of it in the form of manual training, and who has advocated, to the best of his ability, the necessity of thoroly correlating and co-ordinating the activities of hand and brain, I wish to say that I believe it the part of wisdom not to make such broad claims.

Here is another statement which is open to discussion: "We must not forget that all exercises are as much activities of the brain as of the muscles." Evidently in this statement the brain stands for the mental activities. Will anyone, after careful consideration, hold that all exercises, particularly in the schoolroom, are as much activities of the brain as of the muscles, or as much activities of the muscles as of the brain or the mind? There might be some advantages to be gained in the process of instruction, if these conditions of equal activity always prevailed. But we know they vary greatly, insomuch that we name this a physical and that a mental exercise, because of the predominance of one or the other of these activities.

The act of walking may become almost entirely a physical activity. The act of reading at first is largely a mental activity. Educators have realized the necessity of arousing and bringing into exercise all the powers of the child, increasing thus the points of contact, and thereby hastening as well as fixing more permanently the learning process. The "trot method" in teaching reading, as it is sometimes jokingly called, is wisely based upon this idea. To place the words, "Run and shut the door," on the blackboard, and have the learner read and do the thing written, is to bring into the act of learning nearly all the child's powers, increase his interest, increase the points of contact in the learning process, and make more permanent his acquisition.

But in the schoolroom exercises there is so little opportunity of combining in equal proportions the physical and mental that, unfortunately, this happy combination is almost wholly divorced, and the learning process so often becomes a lifeless process, having in it but little of even healthy mental activity. We certainly need to press this point, that school work is entirely too much directed toward the vain attempt to call out and develop the intellectual at the expense of the physical; yes, and it should be added, at the expense of the intellectual as well.

My argument for placing greater emphasis on physical training in our schools is that thru it our children may have stronger, healthier bodies, which may become the readier servants of their minds; clearer brains, which may acquire keener powers of investigation, and thus make possible the development of stronger mental fiber and the attainment of a broader, nobler life.

DEPARTMENT OF SCIENCE INSTRUCTION

SECRETARY'S MINUTES

FIRST SESSION.—THURSDAY, JULY 11, 1901

The department met in Room 111, Central High School, Detroit, at 3 P. M., and was called to order by President N. A. Harvey.

Music—solo, "The Night Has a Thousand Eyes," *Lambert*—by Miss Grace Bert.

President Harvey delivered an address on "A Plea for the Study of Educational Philosophy by Teachers of Science."

A paper on "What the Teacher of Science Can Do to Increase the Estimation in Which Scientific Studies Are Held" was read by W. S. Blatchley, state geologist for Indiana, Indianapolis, Ind.

A paper on "The Status of Science Instruction in the Secondary Schools of the State of New York" was presented by S. Dwight Arms, inspector of secondary schools for the University of the State of New York, Albany, N. Y.

Joseph Carter, of Illinois; Elmer A. Redman, of New York; and C. D. Lowry, of Illinois, were appointed Committee on Nominations.

Discussion of the papers followed by C. D. Lowry, Chicago, Ill.; S. Dwight Arms, Palmyra, N. Y.; W. H. Norton, Mt. Vernon, Ia.; J. E. Armstrong, Chicago; J. A. Merrill, West Superior, Wis.; and Mr. Nichols, Chicago, Ill.

SECOND SESSION.—FRIDAY, JULY 12

The meeting was called to order by President Harvey, and the following program was rendered:

Music—solo, "The Dandelion," *Protheroe*—by Miss Grace Bert.

"Agriculture as a Science for the Elementary Schools," by Joseph Carter, superintendent of city schools, Champaign, Ill.

"The Relation of Physical Geography to Other Subjects," by W. H. Norton, professor of geology, Cornell College, Mt. Vernon, Ia.

Discussion followed by Mr. Jacques Redway, Mt. Vernon, N. Y.; Mr. C. F. Dutton, West High School, Cleveland, O.; and William H. Snyder, Worcester, Mass.

In accordance with report of the Committee on Nominations, the following officers were elected for the ensuing year:

President—Franklin W. Barrows, Buffalo, N. Y.

Vice-President—W. H. Norton, Mt. Vernon, Ia.

Secretary—W. S. Blatchley, Indianapolis, Ind.

The following resolution was adopted:

Resolved, That the sincere thanks of the Department of Science Instruction are due, and are hereby tendered, to the school authorities of the city of Detroit, for the use of a convenient room for meeting; to the local committee, for the completeness of its arrangements, including the graceful reception of Thursday evening; those who furnished music; and to the local press, for its courtesies.

On motion, the department adjourned.

CHAS. NEWELL COBB, *Secretary*.

PAPERS AND DISCUSSIONS

PRESIDENT'S ADDRESS—A PLEA FOR THE STUDY OF EDUCATIONAL PHILOSOPHY BY TEACHERS OF SCIENCE

N. A. HARVEY, HEAD OF THE DEPARTMENT OF SCIENCE, CHICAGO NORMAL SCHOOL, CHICAGO, ILL.

There is a general feeling that science and philosophy are essentially opposed to each other. As each is commonly understood, there may be some reason for this belief. The scientist believes that the philosopher lives in the realm of intangible ideas, and projects from his ratiocination unprovable propositions. The philosopher is inclined to look upon the man of science as one who is so engrossed with the details of his subject that he is unable to see the relation it holds to the world in general, on both its material and spiritual sides. The grounds for this opposition are passing away. Philosophers are more and more willingly adopting scientific methods, and scientists more willingly push their conclusions beyond the limits of visible and tangible things.

Something of the contemptuous indifference of science toward philosophy in general has been manifested toward educational philosophy in particular. There is probably some justification for such an attitude, but I believe that it will soon be recognized that science and philosophy are necessary to each other and neither can be neglected.

There is no disposition or intention in the present paper to criticise adversely science or science teachers. But he is a true friend who indicates to us how we may improve our work. This paper is prepared for the purpose of indicating an element in science teaching in general, and high-school science in particular, that is of very considerable importance if science is to maintain its position as a major subject in our schools.

The past forty years have witnessed a remarkable revolution in habits of thought. The apotheosis of Darwin and Lyell and Agassiz and Wallace renders it almost impossible for us to realize that there was a time when the teaching of science in schools was not felt to be a necessity. The startling nature of the theories discussed, the brilliancy of their demonstrations, the efficiency of the methods adopted by these leaders of the scientific renaissance, led to a demand for the introduction of scientific studies into the secondary schools. Hence originated a demand for teachers of science that could not be supplied. The methods adopted were crude and bookish. Mr. Forbes has given some amusing illustrations of this phase of science teaching. One teacher asked a young lady to what class of animals the turtle belonged. She thought it was a

crustacean, having in mind, no doubt, a pie with its upper and lower crust and the filling between. The teacher decided it was a mollusk, because it had a shell.

Next came a demand for laboratories with improved facilities and a reasonable comprehension of the possibilities of science teaching. This rendered the old-style teacher useless and incapable of filling the position of teacher of science. His place has been supplied in part by the young university graduate, trained in university methods of laboratory research, but whose inclinations and training rank him rather as a scientist than as a teacher. He is inclined to teach the subject rather than to teach the pupil. His eyes are fixed upon the recent discoveries in science rather than upon the discussions of educational methods. He is likely to be found at the meetings of the American Association for the Advancement of Science, which is very commendable, if he did not also habitually neglect the meetings of the National Educational Association.

The result has not been altogether satisfactory. There is a feeling, more or less prevalent, that the claims of science have not been fully justified. This finds expression in occasional articles in educational journals; in the recent great gain in the history and language courses over science in high schools; and in the refusal of colleges and universities generally to demand knowledge of science as a requirement for admission to college.

I can but feel that there is some ground for this coolness toward scientific subjects. My own experience would lead me to say that there may be some reason for the position that universities assume. I have recently had occasion to teach two classes a day in physics for three successive years. One was a class of high-school graduates, all of whom had studied physics. The other class had not studied physics. The two classes did identical work in the laboratory. For three successive years the tabulated records of the accuracy of data obtained in the laboratory showed that the class which had never before studied physics exceeded the accuracy of the high-school graduates in the proportion of about 7 to 3. It was a case peculiarly favorable for comparison, and I feel sure that the comparison is indicative of an actual condition in those classes.

The only explanation that I can suggest is that the teaching of the high-school graduates had been conducted under the influence of improper ideals; that the teachers were physicists rather than teachers; that, in other words, they needed to study educational philosophy, and to get a rational knowledge of the content of the subject.

Educational philosophy has a particular problem to solve. It seeks first of all to determine the laws of thought. It is a necessary assumption in all our attempts at education that, within certain limits, human minds are alike. It would seem that every teacher ought to know as clearly as possible the way in which the human mind acts.

Educational philosophy seeks also to determine the way in which the mind grows. The teacher usually works upon the young and immature mind for the purpose of enabling it to reach a final maturity greater than it would without such training. No teacher who stops to think about the matter will deny that this, too, is a very necessary thing for the teacher to know.

Educational philosophy tries to determine what is the purpose of education and what is the end toward which the efforts of the teacher are consciously directed. Here is a place in which teachers and philosophers are likely to differ widely. Every teacher will probably acknowledge that it is necessary to have a fixed aim, but that the aim is so apparent and so self-evident that no study of philosophy is necessary to have it clearly before him. The aim and purpose are not so apparent to the philosopher.

Finally, educational philosophy seeks to determine the content of the subject. That is, it tries to determine what the subject contains that can be utilized by the teacher for the purpose of leading the student to the real end of education.

If there has been one advance in educational truth better demonstrated than another, it is that in schools for general education the knowledge of the facts acquired is not the chief value to be derived from a particular study. There is something more important than that, even in science. Just as the benefit derived from the study of algebra is not to be looked for in the answers to the problems that the student so laboriously solves, and the value of the study of Latin comes not from the knowledge of the historical facts that the pupil learns while reading the Latin language, so the value of the study of science does not depend upon the knowledge that the pupil acquires, but upon the power the student acquires while gaining that knowledge. In physics one set of exercises may be substituted for another without any disadvantage. It makes no difference whether one selection of animals is studied in zoölogy or another, provided other things are equal; and one set of exercises in chemistry may be a full equivalent for another series, and yet it would be wrong to give both. In fact, there is recognized a fair degree of equivalency among scientific subjects; something in which they agree among themselves and differ from other subjects in their power to influence the mental habits of students.

In our work in zoölogy we study the structure and life of animals, but if my classes fail to see and to recognize the processes by which a general concept of a group is formed; if they fail to discriminate and compare; if they do not get into the habit of analyzing a specimen before them and of examining it part by part; if they do not learn what is involved in a logical definition; and, more than this, if they do not carry this habit of mind into every other subject in school, I feel that my work

has been a failure, no matter how many or what animals they have studied, or how neat their notebooks, or how artistic their drawings.

In the determination of the laws of falling bodies, if my classes fail to perceive the continued activity of a constant force by means of the effects; if they do not recognize the uniformity in the apparent diversity; if they do not recognize that here is a law and how to perceive that law; if all that my students get out of the exercise is knowledge that $d = \frac{1}{2}gt^2$; or, even worse, if they learn that in the laboratory they can get the result that the text-book says they can get, that the book has told the truth and they have verified the statement, then I am not only a failure as a teacher, but I am a sham and a fraud, and my laboratory is part of a juggler's outfit, the principal purpose of which is to dazzle the pupil and the public.

If, in the determination of copper in copper sulphate, I fail to make my pupils see that the atoms of copper in the final compound which is weighed are the identical atoms with which we began; if the pupil is unable at any stage of the proceeding to point out where the atoms of copper are, then my work is a failure, and the educational value of chemistry is either accidental or negative.

The results obtained from the pursuit of scientific subjects under the influence of such a conception are likely to be very different from what they would be if it were believed that the knowledge of a few animal forms or a few experiments in physics were the purpose of scientific study. Of course, it is understood that a professional chemist, or an electrician, or an investigator in biology, must know the facts of the particular branch of science that engages his efforts, and must set to work directly and explicitly for the purposes of learning those facts. But that is a phase of work that does not apply to high-school science.

I do not decry the learning of facts, nor would I set up for the pupil this more important but less tangible aim. By a pupil's knowledge of facts the teacher may test in a measure the clearness of comprehension, the awakening of power, that the pupil obtains. But the teacher must look beyond the mere facts of the subject to the true content that furnishes the reason for its introduction into the curriculum.

The day has gone by when a knowledge of subject-matter is considered sufficient preparation for teaching. How much knowledge of mathematics, higher and lower, is necessary to make a person a good teacher of fourth-grade arithmetic? How much knowledge of literature and language would guarantee success in teaching third-grade reading? How many university graduates would undertake a position in the grades of a city school with assurance of success? It is only a tempting of Providence that permits persons too poorly prepared to do grade work to teach in a high school. The application of pedagogical principles is as necessary to high-school work as it is in other grades, and university methods and models are not always capable of universal application.

The teaching of science is still in an inchoate and formative condition. There is no general agreement among teachers of any science, nor between different schools, concerning what shall be taught. Perhaps physics is the science which in high schools is best taught and most clearly defined. But physics in one school means a very different thing from what it does in another school.

The past few years have witnessed many attempts to formulate a course of study in science that shall constitute a point of departure for the teaching in high schools; something that high schools can teach and that colleges can reasonably expect; something that shall be of value to all students who do not expect to go to college; and yet something that shall be a fair equivalent for preparatory studies that are now required for college entrance. This section of the National Educational Association four years ago appointed a committee for the special purpose of formulating such a course. That committee, after much work, failed to agree, and, so far as accomplishing what it undertook to do, it is as if it had not been. No such course has yet been formulated, and I believe that no such formulated course ever will be generally adopted until it has its basis in the activities of the pupil rather than in the facts of science. A successful and meritorious course in science can never be made by addition nor subtraction nor substitution. No series of exercises can ever be presumed to give constant results. It certainly is not possible at the present time, and may never be possible, to state a course of science in terms of mental activity. But until that is done all of our courses in science must be tentative and unpedagogical. Until someone makes a study of the psychology of laboratory science, or shows just the phases of human activity that are most economically cultivated by each scientific subject, our teaching must continue to be more or less empirical and unscientific.

The recent recovery of classical subjects from threatened displacement has followed the recognition that the language of a people is the key to the thoughts of a people, and not merely a quantity of information, valuable or useless as the individual judgment considers it. The revival of history has come about from recognition of the fact that history is an expression of the life of a people, and not merely a catalog of miscellaneous events. A similar change must occur in the teaching of science. The purpose and reason for science instruction must be sought for in the mind of the pupil, and not in the facts of the subject. For this aspect of the case I plead with all the earnestness of a decided conviction.

The greatest contribution of science to pedagogy has been the "scientific method." The "scientific method" is not a method of teaching, but it is a method of thought. It is a method capable of universal application. This universal method, in all of its ramifications, should constitute the basis for all our courses of study in science, and should determine the method and data of teaching. I plead for a study of this universal

method of thought, and for its exemplification in the things we teach. Then will there be no question concerning what shall be the course of study in science, no hesitation on the part of colleges to accept it as a college-entrance requirement, and no doubt concerning the value of science teaching.

*WHAT THE TEACHER OF SCIENCE CAN DO TO MAKE
THE TEACHING OF SCIENCE IN SECONDARY SCHOOLS
MORE POPULAR*

W. S. BLATCHLEY, STATE GEOLOGIST FOR INDIANA, INDIANAPOLIS, IND.

The civilization of the world of today is the net result of the study of science during the centuries past. Fifty thousand years ago man was nature's slave—a wild animal roaming with still wilder animals over the boundless plains and thru the unbroken forests of Asia and Africa, or mingling with the hyena and cave-bear in the caverns of central Europe. Cowering with fright at the sound of the lightning's voice; gazing with awe upon the sheets of flame and jets of steam as they issued from volcanic furnace; wondering at the mighty strength which hurled the massive rock down the mountain's side, man stood surrounded by the forces of nature, yet ignorant of their power. Naked he was; scorched by the sun by day and pinched by the frost by night; hungry, unless by chance he happened upon a tree of wild fruit or slew by brute force one of his daily companions; houseless, altho surrounded by the material that was to shelter the millions; without family ties or the simplest knowledge of a form of government, man was hardly on a par with his distant cousin, the gorilla of today. Compare with the animal of then the cultured gentleman of now, and what scientist but would hesitate before pronouncing them of the same species!

It is not necessary in this connection to review in detail the various stages of man's civilization from the moment that he first used fire to warm his body and cook his food, on up thru the ages of stone, bronze, and iron, to the present age of steam and electricity. Suffice it to say that his advancement was brought about by the mental operations of independent observation, experiment, classification, deduction, and generalization. These are the operations which lie at the base of all scientific training, all scientific knowledge. In our secondary schools—high schools and academies—he alone is a successful teacher of science who can lead his pupils properly to observe and experiment. After these come the higher steps of comparison, deduction, and, finally, generalization, or the proper correlation and unification of observed facts and phenomena. These more advanced steps of scientific training are, in my opinion, suitable mainly to the curriculums of colleges and universities. But to the great majority of high-school pupils a college or university

course is impossible, and the question naturally arises whether the training which the pupil secures in secondary schools from the studies of chemistry, physics, botany, or zoölogy repays the time and expense devoted to these studies. The answer to this question depends largely upon the training received. If text-books are studied by themselves, and facts and theories alone are taught, my unhesitating answer would be an emphatic *No*. If texts be used only as aids, and information regarding the subject in hand be gathered from every available source—if, in other words, individual observation and experiment be the main idea inculcated by the teacher—the science work of secondary schools will lead up to that independent thought which is the greatest object to be desired among the masses of the present and future generations.

The leading biologists tell us that man differs from the higher animals in that he possesses the power of "abstract thought." Abstract thought! Many possess the power, but how few ever use it! How few ever *think*, in the true sense of the word! Too many, far too many, persons go thru life content if they are never hungry, never cold. Their thoughts, their ideas, are of the simplest kind, and come to them without being sought. To think is to labor, and if it bring not gold it is, to the majority of mankind, so much time wasted. There is, to such persons, little pleasure in thinking other than about food and clothing and shelter.

In order best to develop individual observation and the resulting power of independent thought, the study of the sciences should begin in the elementary schools, with the observation of the more common natural objects, and with simple experiments; and up to the high school no text should be used, but the observation lessons should be made the basis of, or correlated with, work in language, drawing, and literature.

In the high school a combination of laboratory work, text-book, and thoro didactic instruction should be carried on conjointly, one-half or more of the time being given to laboratory work, i. e., actual work by the pupils, with plants and animals, chemicals, or physical apparatus, as the case may be. Of all such laboratory work accurate notebook records, accompanied, where possible, by exact drawings, should be kept, and all laboratory work should be under the personal supervision of the teacher at the laboratory desk.

Successful science teachers are born, not made, and no man or woman who is "born tired" can ever hope to become an Agassiz or a Jordan. In other words, seven years' experience in one of the largest high schools of Indiana proved to my satisfaction, if I did not know it before, that no one can be successful as a science teacher unless he or she is willing to work, and work hard. Well do I remember the question put to me by a lady teacher from a neighboring town who was visiting my zoölogy class and watching the children at their dissection. "But, Mr. B.," said she, "does not this require a great deal of work on your part?" "Certainly,

madam, and work is what I am paid for." She elevated her nose a degree or two and soon left the room; and returned, as I afterward learned, to her old method of teaching Steele's *Zoölogy* by rote. She belonged to a class of science teachers the members of which we may designate as "fossils"—a class which happily is growing less in numbers as the years roll by, but which today is still much too large. The members of this class who teach zoölogy never see or use a specimen unless it be a horned toad from Texas or a dried sea urchin from Buzzard's Bay. They have no zoölogical works of reference except the pictures in the back of Webster's unabridged dictionary. They spend days in 'descanting with their classes upon such important biological facts as the "comparative length of the tail in the different species of monkeys," or, as in a case gone down in history from one of the leading high schools of Indiana, "On which foot of the ornithorhyncus does the webbing extend past the toes?"

That I am not using hyperbole in speaking of their teaching, let me read you verbatim from their standard author, Steele, the sole fact which he gives concerning the leading family of one of the seven great orders of insects. Here it is:

Acridida.—The grasshoppers or locusts of the western states belong to this family. They come in such multitudes as to give sunlight the yellow tinge of dense smoke and to eat a large field of grain in an hour.

And yet it was proven conclusively, no longer ago than 1896, that a large majority of the high schools of Indiana where zoölogy was taught used Steele's book alone and taught such bosh by rote. What a travesty upon nature teaching! What a blot upon our boasted advanced scientific methods!

As, yielding to the demands of the times, the "fossil" zoölogy teacher steps aside, he often makes way for one of another type which we may call a "special microscopist." The latter is a product of the one-sided development theory at present so conspicuous in some of our higher institutions of learning. He is an evolved histological and embryological specialist, with a B.S. after his name, and a summer or two's experience at some seaside laboratory to give him added prestige. He is an expert in the use of the microscope and microtome. He knows every detail concerning the embryology of the sea-squid and the development of the amphioxus, but he does not know a jumping-mouse from a long-tailed shrew, an oriole from a cat-bird, nor a hessian fly from a chinch-bug. The only field of nature which he has ever explored, or which he deems worthy of exploration, is the field beneath the lenses of his microscope.

When he assumes the biological chair, he does so for two reasons: first, to replenish his exchequer; second, to use his position as a stepping-stone to a higher one, where his methods are in vogue.

He finds on entering the high school no equipments for teaching zoölogy, no collection except a worm-eaten, dried sea-urchin and a half-rotten, alcoholic horned toad; no library except a worn copy of Steele's *Zoölogy*. He appeals to the school board for aid. Their belief in the potency of his sheepskin and other credentials causes them to allow him \$300 for supplies. Two-thirds of this he expends for compound microscopes, a microtome, and reagents; one-sixth of it he sends to a marine supply house for sea-urchins, star-fish, and amphioxus; and with the remainder he purchases a few standard reference works on embryology and morphology; and then settles down to teach his pupils of fourteen or fifteen years of age in the high school the same facts, according to the same methods, which he learned in the great universities where he received his special training. His pupils bring in for a time birds, reptiles, and insects from their native heath, but their instructor can tell the youthful collectors nothing of the habits, life-history, or classification of their specimens. Their natural desire for collecting and observation, which, with a little encouragement, would soon have resulted in much good, both for themselves and for the high-school collection, is soon chilled.

They cease to notice the animals and plants about them, and in a month or two settle down under the teacher's guidance, and for a year study sections one three-thousandth of an inch thick of some half-dozen marine forms, and perhaps, if they know where to find them, of the eggs, or tadpoles, of frogs or salamanders.

At the end of the year they can talk smatteringly of ectoderms, blastospheres, actinial filaments, and calyco blasts. They can make fair diagrams of the sections they have studied, but they know little of morphology, less of adaptation and correlation of organs, and absolutely nothing of the classification of animals.

They graduate from the high school and go out into the world. One out of ten goes to a normal school, college, or university. One out of a hundred of these makes a specialty of zoölogy, and perhaps follows in the footsteps of his former preceptor. The other ninety-nine become artisans, merchants, professional men, or farmers; or, if of the gentler sex, the wives of the above. They go thru life meeting daily nature's objects on every hand, yet seeing them not; surrounded by problems interesting and instructive, yet knowing nothing of the problems themselves or of the method of their solution. They see no order, no relation among the animals and plants around them. Knowing nothing of classification, they are unable to find the name of any plant or animal which, from some conspicuous external character, attracts their attention. If they should happen upon Kirtland's warbler, they would never know but what it was the common "yellow-rump."

From the above it will be seen that the pupil receives but little training in the powers of observation or the process of experimentation, when

either a "fossil" or a "special microscopist" occupies the chair of zoölogy in a secondary school. The teacher of chemistry or physics who uses the text alone, or who performs all the experiments himself, is a "fossil;" and he who demands a costly laboratory equipment to illustrate simple truths which can be shown more plainly with home-made apparatus can be classed in the same category as the "special microscopist." In either case the results are wholly incommensurate with the time and labor required of the pupil, and the college professor who refuses to credit the science work of the graduate from those secondary schools where the teaching is done in the manner mentioned is to be highly commended rather than condemned.

We are glad to say, however, that the chair of zoölogy in many of the secondary schools is held by a representative of a third class of science teachers, whom we may call "all-around biologists." At times one of these succeeds the "fossil." With the money received from the school board, usually a much smaller sum than that secured by the "special microscopist," he purchases one or two compound microscopes, a number of sets of dissecting tools, ten or fifteen gallons of alcohol, some fruit-jars, etc., and expends the remainder for general reference works on biology, especially those treating of the morphology, physiology, and systematic position of the more common forms of life. These works of reference are in an ascending series, beginning with the more simple, as Huxley and Martin's *Biology*, Huxley's *Crayfish*, Hyatt's *Insecta*, etc., and advancing to the more complex.

The instructor begins his teaching at the very bottom of the work, with a few simple talks, illustrated by common specimens picked up in the neighborhood, in which he makes plain the distinctions between organic and inorganic objects, and between plants and animals. A week or two is then spent upon the elements of histology, explaining, by the use of typical sections, the parts of a cell, cell multiplication, and the structure of the primary animal tissues. The pupil is then put to work for himself, with Colton's *Zoölogy*, or a similar book, in hand, upon a grasshopper as a type of arthropods and insects. Three weeks are spent upon this, and a week each upon typical examples of the other six orders of insects.

After a careful examination of the structure of each type, including accurate drawings of the principal organs of each, and the reasoning, led by skillful questions put by the teacher, from structure to function, the teacher himself gives, for one or two days, a talk upon the systematic position of the common representatives of the order, illustrating the remarks by fifteen or twenty examples from the fauna of the home county. Questions of adaptation, local distribution and the causes thereof, come up in such talks and are discussed by both pupil and teacher. After the insects comes a study of a mussel and a snail as types of mollusks, and a

crayfish as a type of crustaceans. In this way the first half-year is spent upon invertebrate forms of life.

As soon as the pupils begin to understand something of the scope of the work, a certain group of animals belonging to the county, such as beetles, crickets, snails, batrachians, or mammals, is assigned to each one to be worked up during the year outside of school hours. As full a collection as possible of the group assigned is to be made by the pupil. Full notes are to be kept on local habitat, distribution and the causes thereof, habits, food, and so on, these notes to be incorporated into a paper to be read before the class at the end of the year, which paper, together with the collection, shall be graded as a part of the year's work. All duplicates collected are to be deposited in the high-school collection, which thus increases rapidly in size.

The teacher goes with the class into the field on a number of occasions in fall and spring, helps each pupil collect in his or her special line, instructs them in the preparation of specimens for a permanent cabinet, cites them to works of reference on their respective groups, etc. The "all-around biologist" has for his schoolroom motto the following: "He is a good naturalist who knows his own parish thoroly."

In the work proper the second half of the year is devoted to vertebrates, modifying this work so that, after dissecting a type of each class of vertebrates, the pupil is required to draw up an accurate description of each of three or four members, and from the description determine the systematic position of each by the aid of such a work as Jordan's *Manual of Vertebrates*.

Following this course of instruction the average pupil, at the end of the year's work in zoölogy, will have something of a knowledge of the relationship existing between animals and plants, and between the different groups of animals themselves. He will have a knowledge of the gross anatomy of the principal organs of at least a type mollusk, crustacean, insect, fish, reptile, bird, and mammal. He will be able to reason from structure to function, and to understand at least the principles of adaptation and correlation. He will have gained a certain power of comparison and the power of grasping the leading distinctions between the principal groups of animals. He will be able to go into the field, observe, record, and collect the animals of any group in which he may be especially interested. He will be able to take a manual and find for himself the name and systematic position of any animal which he will be likely to meet in his after-life.

Morphology, physiology, and systematic zoölogy are then, in my opinion, the three divisions of zoölogy which should be particularly dwelt upon in high-school work, while embryology, advanced histology, and microscopic technique should be relegated to the higher institutions of learning.

The order in which the sciences shall be taught in the high school deserves a passing mention. If the experimental sciences, viz., chemistry and physics, alone are taught, the chemistry should come before the physics. Since the plant must ever precede the animal and gather for the latter the energy and form for it the food—the living protoplasm—necessary for its existence, it follows that botany should precede zoölogy among the biological sciences. Based on their relation, one to another, the natural order which the true scientist will give to the different subjects is as follows: chemistry, physics, botany, zoölogy, physiology.

Especially should chemistry precede the biological sciences, for a knowledge of its principles is absolutely necessary to the proper understanding, not only of them, but of geology, mineralogy, and kindred subjects. Personally, I owe more of my general knowledge and understanding of science to a good working knowledge of chemistry and its laws than to anything else. The atoms with which chemistry deals are to the universe what the letters of the alphabet are to the English language. Can we understand the latter and not know our letters and their various sounds? Can a man have a broad knowledge of any branch of science and know nothing of the elements which form the objects of which the science treats?

The teacher of physiology may tell of the changes occurring in the food during digestion and respiration. He may speak of the hydrochloric acid in the gastric juice; of the carbon dioxide and oxygen and nitrogen in the atmosphere; of calcium phosphate in the bones, and phosphorus in the brain. He may talk for hours of the proteins and carbohydrates and hydrocarbons of the foods; but unless he and the pupils understand the elements of chemistry, unless they have seen and examined the substances mentioned, he might as well talk to them of Greek verbs and Sanscrit nouns. He may, with scissors, forceps, and scalpel in hand, show the students systems and organs, tissues, and, by the aid of the microscope, even cells; but, unless he is a chemist, there he must stop. He cannot go farther and, with crucibles, reagents, and scales, show them that the complex animal before them has been built up of three invisible gases and a substance like charcoal.

He may hold in his hand two objects, similar in size, color, organs, everything; twins from the same mother in all outward respects. One pulsates and throbs with that which we call "life." It possesses heat, bodily motion, animal power. The other is cold, motionless, pulseless, throbless, a thing of clay. What is that "life" which the one possesses and the other lacks? Ah, there's the rub! With the wisest of men we can only answer, "*Quien sabe?*"

If ever answered, it will be by the science of chemistry, which asserts that what we call "life," be it in plant or be it in animal, is but the manifestation of the workings of that king of natural forces, chemism; that

when the elements in the living laboratories, the cells of the organism, cease for an instant to combine, the nascent power which they possessed at the beginning of that instant is gone forever—affinity ends—what we call “death” ensues, and the elements go back once more to Mother Earth to be used again by some succeeding organism. If, then, this science not only has to do with every other, but is the basis of our very existence, should not each high-school pupil be taught its principles in their proper order?

It is my opinion, based upon extended personal experience, that at least one-fourth of the high-school course should be devoted to science study, and this amount of preparation should be required for entrance into college. Suppose that the time of the high-school course be four years, and that not more than one graduate out of twelve enters college at its close, will one year devoted to chemistry, one to physics, one-half to botany, one to zoölogy, and one-half to physiology, in the order named, be too much science for these pupils in proportion to their other work, when we take into consideration what the study of science has done for civilization in the century just passed? For did not man advance more within that century than he had done in all the eighteen hundred years preceding? And what was the chief cause of that advancement? Not the study of Greek and Latin, not the solving of problems in algebra and geometry, but a closer study of nature—the discovery of those grand, immutable laws of “the indestructibility of matter” and “the conservation and correlation of energy,” and the practical use made by man of these discoveries in harnessing nature’s forces and causing them to do his work.

And now, in closing, let me say that but few, if any, men have ever known, or ever will know, nature in the true sense; for to do so is to know the relation existing between matter and force, between atom and molecule, between element and compound, between cell and tissue, between organ and system, between plant and animal, between each one of nature’s objects and all the rest. It is to view the sciences of chemistry, physics, geology, botany, zoölogy, physiology, all as one grand science—the “science of nature.” It is to grasp, as it were, the universe in one grand view—to stand on an eminence a thousand times higher than any on earth and see all objects in one grand vista before you; and at the same time feel and understand the workings of the great natural forces about you. Then, and then only, can one see and know his relation to all—feel that he is a part of the universal whole—a parcel of the universe—bound to it and kin to all which it comprises.

AGRICULTURE AS A SCIENCE FOR THE ELEMENTARY SCHOOLS

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That there should be a course of science teaching in the elementary schools was borne in upon the minds of educators in this country as soon as the discoveries and methods of Charles Darwin were generally understood; and the idea began to take form when the pupils of Louis Agassiz went back to their schools from Penikese Island. Teachers generally were convinced of the pedagogical superiority of inductive methods of teaching, and of the high educational value of the content of the natural-science studies. They saw that these sciences should have a place in the elementary schools, both because of their disciplinary value and because of their training in habits of observation.

NATURE STUDY

This science-teaching sentiment took tangible form some thirty years ago in the passage of laws which led to the introduction of science teaching in the schools of some of the states. Text-books were prepared. Some of them were taught—literally. It happened, in too many cases, that only the book was taught, and not the science. Educators soon saw that memoriter teaching of the facts of a science was neither scientific nor pedagogic; and the over-use of text-books was discouraged, and teachers were advised to go directly to nature for their lessons. Thus nature study came. In some schools and with some teachers it has cultivated the powers of observation of the children and has added to their knowledge of the processes of nature; but in very many cases it is not at all a study of nature. Sometimes it is a mere fad. Books beyond counting have been written; oftentimes by authors who have only read other books—picture-books with the cusps of the new moon turned the wrong way, nature-study songs for children to act out:

“When the corn begins to sprout,
Then *two* wee leaves come peeping out.”

Even the purely literary readers now attempt to give lessons in nature study—and to point a moral, too. One book, which came to my attention since this paper was begun, points a moral by making the larch an ever-green. The latest volume, indorsed by high educational authority—*A Nature Study Reader*—begins with Marco Polo and goes on to the aurora borealis. Thus nature study has come to have a standing similar to that of object-lessons twenty-five years ago, of which Compayré has said: “The object-lesson has had the same fate as the so-called intuitive method. Like all novelties, ‘object-lessons’ has become a beautifully vague term, which each one interprets in his own way. A long observation of school affairs has convinced me that if one does not wish to be

understood he has no surer means than to speak of object-lessons." Nature study ought not to be permitted to be side-tracked, and finally to be abandoned, as it very likely will be, in the scrap-pile of worn-out fads. Nor should it be allowed to vanish in a pleasant phase of ephemeral literature. The story of *Grumpy and Little Johnny Bear* is interesting and valuable, and good literature; so are the stories of *Lobo, Rag, and Vixen*. But nature stories about animals is not nature study; nor are talks about odd and curious things, tho ever so interesting.

Our so-called nature study too often begins with anything or at any place, and leads everywhere and ends nowhere; and, tho interesting and delightful, is often without an element of original investigation, which is the very soul of true nature study. This pseudo nature study ought no longer to run riot among the vagaries of its devotees.

TRUE NATURE STUDY AND AGRICULTURE CORRELATE

Nature study is so very valuable, and its results of such high educational and economic worth, that it should be preserved. How can this be done? Cannot its threads of interest be gathered in one common fabric—co-ordinated about one common subject? Does not the subject of agriculture afford a field into which most of these lines naturally center? Agriculture has at its foundation very many of the sciences. It deals with nature—with living nature. In its field man comes nearest to nature. Here he has made his greatest conquests and his greatest discoveries. The Committee of Fifteen says: "Any science may be taken up best on the side nearest the experience of the pupil." Certainly no other science is so near the experience of so many children as agriculture. Nor does any science more readily lend itself to correct methods of teaching. About 60 per cent. of the children of the elementary schools of America come from the farms, about 20 per cent. from the smaller towns in which the rural spirit predominates, and about 20 per cent. are urban. Tho these last are more in need of this kind of teaching than either of the other classes, and will be reached with the greatest difficulty, still they are not entirely inaccessible, and nature-study lessons correlated with agriculture can be as easily provided for them as can any other lessons in nature study. But this paper relates more particularly to the other two classes,

How shall the teacher begin? There are many ways. For the lower grades there might be a window garden. There are books that tell how to make this, and what to plant therein, and what to observe and how to describe the observations; also, how to observe the germination of seeds, the development of the young plant, the rooting of cuttings, the development of the green coloring matter, and how it is affected by sunlight. Also there are books that tell how to make a garden out of doors and what to raise there, the best methods of cultivating the ground, and the

reasons therefor. Probably 80 per cent. of all our pupils are in schools where, from the playground or the grass plat, from one-tenth to one-half an acre could be used for a garden, on which not only vegetables could be raised, but the larger fruits—apples, plums, pears, and the like. Here could be studied, not only methods of cultivation, but many things that pertain to the growth of plants; as, how they grow, whence comes the material of their growth, the uses of their various parts—as of leaf, stem, tendril, and flower. The processes of pollination could be observed. The reasons why insects visit plants could be learned, and what insects are beneficial and what are injurious. The life-history of some of these insects can be studied thru the egg, larva, pupa, and imago stages; also upon what they live and where they die. This little plat of ground can easily be made a laboratory, where most delightful experiments can be made, and where knowledge can be gained at first hand. Here the soil can be studied; its origin and nature can be easily discovered; its evolution from the fiery rock to the friable food for plants; the effect of cultivation; how water affects it; what plants impoverish it and what plants enrich it. Here can be demonstrated the most important discovery of modern times—a discovery which places in the hands of every farmer a means whereby he can cause to be drawn from the atmosphere the free nitrogen of the air and have it fixed in the soil of any field that he may wish to enrich. This is done by bacteria in the soil, which locate themselves on the roots of legumes and give them power to store up the most valuable constituent of plant food—nitrogen.

LESSONS OF BIRDS

There are other lessons that may be learned in the woods near by. The birds will be there; let the children watch them, learn their songs and know their names and their habits—how they build their nests and get their food and feed their young. Let them look right out of the windows, even during school time, to see what the birds are doing. No well-constituted child ought to be able to sit still when the first oriole of the season sings by the window, or when a bobwhite calls from the fence post.

PROPAGATION OF PLANTS

For the larger boys and girls the garden has more advanced lessons, and work where greater dexterity is required. Let them learn of budding and grafting, and those other methods by which a desirable variety of fruit is propagated. Let them not only learn *of* these things, but let them learn to do the actual work, and let them see and eat the fruit thereof. Let them learn how one desirable form of fruit, as, for instance, the Wilson strawberry or the Rhode Island greening, has spread itself over the continent. Tell them the story of the Sudduth pear, whose branches are now growing on countless thousands of other roots thruout

the Mississippi valley, and are bearing fruit identical with that borne by the branches on the parent root, which still grows on the farm of Titus Sudduth, near Springfield, Ill. Show them the common seedless orange, which now is substantially the only one on the market, and tell them the story of the wonderful journey of the parent tree from its home in the tropics to Washington, its many mishaps before it reached California, and how, since it has arrived there and men have learned how to propagate it, it has added untold wealth to the orange growers of the Pacific slope. Teach the children of plant breeding, of those arts by which new and better varieties of plants are produced.

LESSONS OF INSECTS

Let the children be warned of the great danger there is to all our plants—food plants and ornamental plants alike—from the constantly and rapidly increasing ravages of insects. These “six-footed rivals of ours” require the continuous watchfulness of our ablest experts. Already these enemies have changed much of the agriculture of some states, reduced the value of the lands in some regions, and shifted the centers of population in some sections. Forty years ago it was perfectly safe for a boy in the dark to pick an apple from a tree and bite into it with perfect abandon; now he dare not do so—unless from the tree of an expert orchardist—until careful examination assures him that an enemy is not already in possession. Also let the children know that *all* insects are not enemies, that many are valuable friends, and that if all were destroyed we should probably be worse off than we now are.

The knowledge gained by our experts in these matters, and in many others of like character, cannot be of greatest benefit until this knowledge is disseminated among the people who do the work and control the affairs related thereto. What other means is there of carrying this knowledge to these who are to put it into actual, practical use than to teach it in the elementary schools?

But in agriculture there are still other lessons; there is the dairy, where the various processes depend upon bacteria—where the various flavors of cream and cheese and butter are caused by bacteria.

There are the various implements of the farm—best fitted of all to produce mechanics and inventors; the hydraulics of the wind-pump and the pneumatics of the cyclone threshing-machine are there.

LESSONS OF DOMESTIC ANIMALS

There are lessons from the domestic animals. Millions of money are lost each year in this country by the untimely death of domestic animals because of the ignorance of those having them in charge. Much there is about the horse, the cow, and the sheep which is not generally known, even by the people who own them in large numbers,

because these owners have been neither students nor careful observers ; and much of this can easily be taught, even to children.

LESSONS IN PSYCHOLOGY

If you wish to get above material things, direct the attention of the boys and girls to the growth of mind in the animals about the farm. Here is where the study of psychology begins. They will soon observe that the young things begin with minds all blank ; that, for instance, the young colt, chick, or pig is without fear. He will go to anything he sees move. If he never meets harm, he will always be without fear. Let the child observe how memory is developed, how the laws of sequence seem to be organic in *mind*—as well of animals as of man ; how, if a young colt be given a lump of sugar, or a chick or a pig a tasteful morsel, for only a few times, it will expect under like circumstances to receive a like favor. Children know that each adult animal has an individuality peculiar to itself, and the observant farmer boy can know the peculiar mental structure of each animal of the farm as well as he knows its color or form. The mental characteristics of farm animals are marvelously like those of people—they have their likes and dislikes. On the farm we do not think of giving some men some teams to work. Certain horses hate certain men, and cannot tolerate them. Certain cows will not suffer certain men to milk them ; and the best cows only give their richest milk, and in its greatest quantity, when milked by their favorite men. Only a man of gentle disposition and kindly manner can secure the best results from the prize-winning cows.

HOW TO GET TIME FOR THIS TEACHING

Do you say : "There is not time for all this ; there are already too many things to teach" ? Well, if there is not time for all, if this is more valuable than some of the things we are now teaching, wouldn't it be better to omit some of the less valuable ones ? How much time are we now spending on technical grammar, which, Dr. Hinsdale says, is an abstract metaphysical study that the child should not enter upon at too early an age ; and, if he does, the time so spent is wholly or mainly lost, and the future interest is impaired or altogether killed ? Or how much time are we wasting trying to teach pupils composition when their heads are empty of anything to write ? Or what about the fearful waste of time "working" arithmetic ? Anybody can learn enough arithmetic—presented in the right way and at the right time—in from six to ten months to do any of the ordinary business of life. It is not on record that very many men are in poverty thru ignorance of arithmetic. What about map-drawing and much of the geography grind we are now giving ? What of our history teaching, which is so largely an account of wars and battles ? If we must teach of wars, why not teach of the

war that must be made upon the codling moth, whose ravages, it is estimated, cost us more than \$10,000,000 annually? If we must teach of battles, why not also of the battles that must be made on the chinch-bug and on the hessian fly? When we tell the children of those who have fought valiantly for our welfare, let us not forget to tell them of the lady-bug.

But if we must go on teaching as heretofore because inertia and habit compel us, or because ignorance requires us to do so, what would be the harm in making the school day an hour longer? There will be no danger of injury to the pupils' health by the lengthened session; to take them out of doors to work in the garden, or to study the trees in the park, the flowers and the weeds by the roadside, the sweet clover and the honey bee, the red clover and the bumble bee; to take excursions into the neighboring field to see what the angleworm has done over night; to see how the farmer is cultivating his field; to see the waving wheat in its bloom; to walk between the long rows of tall corn and observe its prodigality of pollen; to see "the sower as he goes forth to sow;" to "consider the lilies of the field, how they grow"—O, there is health and happiness and long life in this! That is the true way of teaching which the Great Teacher showed us, and which Pestalozzi illustrated.

KNOWLEDGE OF AGRICULTURE OF VALUE

Says Superintendent Harvey:

It is unquestionably true that the school which is the best for the boy and girl for farm life, and probably for any other kind of life, should undertake to train them to intelligently observe the things about them. It should not only train them to observe intelligently, but in giving them that training it should direct the mind so that it shall concern itself with what is worth observing, and so the results of the observation will be, not merely curious or interesting information, but knowledge which shall be of value.

Because agriculture is so rich in content along these lines; because it furnishes such ample material suitable to the mind of the child at each stage of his development; because it lies so close beside the pathway which our race has traveled; and because of its supreme, paramount importance as the source of our national prosperity and power, it is pre-eminently the science for the elementary schools.

The last quarter of the nineteenth century is noted for the movement of people from the country to the city—from out of doors into the house. Agriculture is peculiarly a science whose study takes people out of doors. Too much we are growing to be a sedentary people. Too much are we adopting the lazy life of the literary man. It was a literary man who said: "Man is a lazy animal." Too much we are leading our children to think that wisdom is found only at the desk of the literary fellow. This influence is growing rapidly. There are too many children whose reading is confined exclusively to the literary reader, and whose education largely consists in the ability to apprehend what was in

the mind of the author of some so-called literary masterpiece. We work laboriously to teach them to say, "I think thy thoughts after thee, O De Quincey!" instead of leading them where they can joyously say: "I think thy thoughts after thee, O God!"

The average child comes to school all saturated with nature—all alive to its every change, and eager for its wonderful and delightful story. Instead of teaching him along the lines of his experience, we turn him in the direction of literature and myth and fairy mysticism, thereby neglecting all the apperceptive capital he has accumulated. Now, we do not object to this literary matter *in toto*, but we do object to its being the total of his learning. Teach the children, if you must, of the sowing of the dragon's teeth, but also teach them of the sowing of clover and cow-peas, which can double the yield of corn in Illinois and greatly increase the yield of cotton in Georgia. Tell them the story of the wooden horse, if you wish, but be sure to give them more horse-sense than the Trojans had. Teach them all you know of the milky way, but do not neglect to teach them the way to milk. That is, lead them as far and soar with them as high as you may, but be sure, all the time, to let their feet rest on the earth, for it is from the earth that all are sprung, and upon it yet there are untold pleasures, undiscovered beauties, and marvelous strength for the soul of mankind.

THE STATUS OF SCIENCE INSTRUCTION IN THE STATE OF NEW YORK

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Persons well informed as to educational conditions in the state of New York would give general assent to the statement that prior to the current year the general status of teaching in the various sciences was far from satisfactory. While many young people were pursuing science courses, there was, as a rule, little enthusiasm manifested on the part of either teacher or pupil. In number of students and in quantity of work the showing was satisfactory; in quality it was unsatisfactory. Few laboratories, and those, as a rule, ill-arranged and inadequately equipped; teachers in the main having little aptitude for these subjects, and possessed of little or no special preparation; doing their work in a perfunctory way, almost exclusively by the text-book method; very little individual work, and that of a dubious kind; notebooks rarely kept, and, when kept, evidencing lack of care in observation and lack of clearness in statement—these are some of the things that thoughtful observers of the educational field of the state noticed on every hand. As a consequence of the conditions just mentioned, the college people have come to regard the science

work of the schools as of comparatively small value, and there has been an increasing reluctance on their part to grant to students, except to those from a few accredited schools, any appreciable allowance of credits for science work done in the high schools. Notwithstanding this unsatisfactory state of affairs, some quiet forces have been at work in our state for a number of years which were destined to lead to better things. Among these, by far the most potent has been the influence of the New York State Science Teachers' Association, an organization quite limited in numbers, but whose membership contains the majority of the thoughtful, progressive, well-equipped teachers of science in the leading secondary schools, normal schools, and colleges of the state. These people held meetings, wrote papers, published reports, formulated programs, mapped out courses of study, agitated, and worked in season and out of season in behalf of better science teaching for the schools. Their work, their agitation, their literature widely circulated among the schools, have wrought, slowly perhaps, but none the less surely, for the betterment of science teaching in our state.

Taking advantage of the interest manifesting itself among the principals of the state for better teaching in science, the University of the State of New York undertook, in connection with the revision of the syllabus in 1900—a revision which is made once in five years—to formulate its outlines of work along distinctly modern lines. Thru the reorganization of the work which would follow the issue of a new syllabus, the time seemed opportune to stimulate interest in proper science teaching by suggestions regarding the proper arrangement and equipment of laboratories, the teacher's outfit for undertaking such work, the manner in which individual experimentation would best be carried on, and the results to be expected as evidenced by the notebooks, which were to be kept in prescribed manner and form.

In addition it was proposed, as a final evidence of work accomplished, to ask the principals whose schools should undertake science work under approved courses to submit, in connection with the final examination papers and notebooks, certificates as to the proficiency of the students for whose laboratory work approval was sought. For such work, based on a course of study approved by the university, and making provision for a minimum of two periods, of not less than forty minutes each, weekly given to individual experimental work under the personal supervision of a competent instructor, the university proposed to allow twenty credits toward the minimum of seventy-five necessary for a pupil to obtain in order to get "a pass" in that subject. While the fact was recognized by the university, no less than by teachers of science, that in view of the experimental work demanded such allowance was inadequate, it was thought better to make a conservative beginning, leaving the way open for an increase in the credits given for such work, as experience should indicate the wisdom of such a step.

To the stimuli just mentioned there was a quick response among principals and teachers of science. In meetings, small and great, held in New York state during the year, the topic most frequently discussed, attracting the widest attention, and arousing the greatest interest has been the movement for better work in science. In fact, it would hardly be stating the matter too strongly to say that in secondary-educational circles of the state this has been the burning question of the year. This fact indicates a general and genuine revival of interest in science instruction in our schools, and would seem prophetic of a revolution for the better in this department of learning.

In an incidental way I have already indicated the general character of the requirements necessary for approval of laboratory work in the state of New York. For better understanding regarding this matter an elaboration of the points already mentioned seems desirable. First, as to the laboratory itself. The broad principle seems to be well established that a room distinct from the students' study hall, and preferably one that is devoted exclusively to laboratory purposes, should be provided. This room should be comfortably heated, well lighted, and adequate in size for the needs of the maximum number of students likely to engage in experimental work in a given science at any one time. Necessary fittings conveniently arranged, and apparatus suitable in kind and adequate in quantity, are to be provided. To illustrate my meaning, I may say specifically that in the case of chemistry adequate table space for individual work, provided with running water whenever possible, with gas or alcohol lamps, and with the usual outfits for individual work, is necessary for approval of a laboratory course in that subject. In physics, adequate table space to enable members of the class working by two's to perform experiments at the same time, and the apparatus necessary for performing the various experiments mentioned in the syllabus, or their approved equivalents, are also to be provided.

In reference to laboratory equipment in the line of apparatus it will be interesting to know that, under a statutory provision of the state of New York, the university is authorized to pay from year to year half of the purchase price of the apparatus, provided lists of the apparatus are submitted to the university for approval and are found satisfactory in kind, quality, and price. Without using mandatory methods, the university is enabled under this law to direct in a general way the purchase of laboratory equipments, and to see that the money available at any time for such uses is wisely expended. For a number of years past the maximum amount-available for such apportionment has been \$500 annually to each school, and may be apportioned in any amounts from \$5 upward. This provision comes under the general law providing for the duplication of the purchase price of approved books and apparatus. It is optional with the school applying for duplication of money whether it shall apply for

duplication on a list of books, on a list of apparatus, or partly on one and partly on the other. Under this beneficent law the schools of the state have for some years past been strengthening their libraries, especially in the line of general books of reference suitable for use in connection with the various subjects pursued in the schools. During the past school year the new movement in behalf of science has caused a marked decline in the demand for duplication of money for the purchase of books, and a corresponding increase in the demand for the duplication of money for the purchase of apparatus. Many of the smaller schools of the state have purchased apparatus to the value of from \$100 to \$400 each, and in some instances thoroly good working laboratories for experimental work in physics, or in chemistry, or in both subjects, have been fitted up and supplied with modern equipments. Owing to the greatly increased demand for the duplication of money for the purchase of apparatus, the sum which may be apportioned annually to any one school has been reduced to \$250. However, this sum is adequate, as it is quite unusual even in the larger schools for an expenditure exceeding \$500 in a single year to be made for equipment for science work.

While suitable rooms and furnishings, satisfactory equipment, and teachers whose training and experience give promise of successful work are conditions essential to the approval of any course in science, the final test of efficiency must be the results actually accomplished. Laboratories may be roomy and complete in their fittings and furnishings, teachers may have the best training of the schools, and yet, measured by actual results, the science work in a given subject may be far from satisfactory. The things one actually sees on visiting a class, the evidence afforded by the notebooks regarding keenness of observation, correctness of method, and clearness in statement of principles and deductions—these things, coupled with the certificate of the principal that each student for whom twenty credits are claimed has completed the work outlined in the course in a satisfactory manner, and that all his laboratory and notebook work has been satisfactorily done, afford the best possible evidences of efficiency with the remotest possibility of misinterpretation or mistake.

By far the greatest obstacle in the way of progress in science work in the state of New York is the lack of satisfactorily equipped teachers. Good teachers of Latin, Greek, French, German, mathematics, and to quite a degree in English, are not difficult to find. But the experimental sciences have until recently occupied such obscure positions in the programs of our schools that there has been little demand in our state for teachers specially equipped for these subjects. A large proportion of teachers in the various high schools and academies of New York state are graduates of the state normal schools. These schools, by reason of their manner of organization, congested curricula, and large classes, have been

quite unable to do as much for their students along special and individual lines in science as would seem essential to one who is to give instruction in those subjects. The colleges have done immeasurably better for their graduates, and the recently increased opportunities and facilities in those institutions, both in their regular and in their summer-school courses in science, render the outlook hopeful. Meanwhile, ambitious teachers are getting in line, reading, studying, experimenting, investigating on their own account, and within the next year or two many of them will take the courses open to them in the various summer schools and colleges of the state.

The actual results accomplished during the first year of the new science movement in the state should not be passed by without comment. There can be no doubt that much more individual experimental work of a satisfactory kind has been done than in any previous year. As a result of the stimulus arising from the new syllabus and the allowance of credits for satisfactory work based on approved courses, science teaching has taken a new impulse, and a new interest and zeal for this much-neglected department of high-school work have found expression. In physics the courses have been approved in sixty-two schools; in chemistry, in sixty-six schools; in botany, in twenty-six schools; in zoölogy, in seventeen schools. But these figures by no means indicate the strength of the new movement. Evidences multiply on every hand that the good work is but begun. Inquiries and information coming to the university from all quarters of the state indicate that the activity of the past year will be repeated and redoubled in the year to come. It is a movement that gathers momentum as it goes. A new laboratory, a new outfit in one school, becomes at once an object-lesson and an object of rivalry to neighboring schools. The effective work done by a well-equipped teacher along scientific lines in one school stimulates a desire for work equally good in quality on the part of neighboring schools. The movement is cumulative, and it will not sound like prophecy to remark that it is destined within a very few years to revolutionize the science work of the Empire State.

The revival of interest in science has been fruitful of good in another direction. Teachers of science, authors, and publishers have been busy during the year preparing notebooks, analyses, schemes of study, textbooks, and other aids supplemental to the scholastic phases of instruction in science, while makers of apparatus and of laboratory equipments, especially for physics and chemistry, have vied with one another in the construction of standard and new devices for the more effective illustration and exemplification of the facts and principles involved in the pursuit of those studies.

Incidentally it will not be out of place for me to comment on the influence of the University of the State of New York in inspiring and

rendering effective this educational movement. No more potent force in suggesting, promoting, and directing educational effort along correct and developing lines can be found anywhere in the world. Thru its syllabus, thru its system of examinations, thru its visitation and inspection of schools, thru its grants of money, it carries to communities the suggestion, the information, the inspiration, the assistance that are most needed.

The strengthening and development of schools of academic grade in the smaller villages of the state, thru the influence and stimulus coming to those places thru the University of the State of New York, is a matter of common remark. University inspectors and others interested in educational work are frequently told by members of local boards of education and by principals that their school owes very much to the university—in fact, that the university has made the school what it is. It has occurred again and again that a village school starting with lowest rank, having but three teachers and a total enrollment in all grades not exceeding sixty to eighty pupils, and undertaking but one year of academic work in its higher department, has within the limit of a very few years come up to the rank of a high school, doubling its attendance, doubling its teaching force, erecting a new building at a cost of from \$5,000 to \$15,000, and doing systematic and effective academic work under courses of study of four years' duration. With modification, the same general remarks regarding the progress and development of schools in New York state thru the university system might be applied to the schools in the larger towns and cities of the state.

No more marked illustration of the vitality and effectiveness of such a system could be found than the one afforded by the movement described in this paper for improvement in science work. Without restraint, without friction, without imposition of authority from above, thru the potency of advice and leadership, and thru the stimulus of financial aid from the state, much has been accomplished in a single year, and what has been wrought within the year may fairly be taken as an omen of still better things that are to be.

THE RELATION OF PHYSICAL GEOGRAPHY TO GEOLOGY

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In geography we have not as yet reached that stage when vague spheres of influence give place to definite territorial boundaries. Our science is still unorganized, its frontiers are not demarked, and the divisional lines of its provinces are not yet drawn. My subject compels me to take up a number of questions still so unsettled that I can hardly hope to suggest a *modus vivendi* which in this time of boundary disputes will prove acceptable in all its details to many besides its author.

At least in America we shall agree that physical geography is not identical in its limits with what our English friends term physiography. It is not a summation of our knowledge of nature. Such was the older physical geography, and, valuable as was its view over the kingdom of science, it proved itself impracticable as an educational instrument. With its string of unconnected chapters on the elements of eight or nine different sciences, it is no wonder that there was sometimes applied to it the sacred definition of the circle whose center is everywhere and whose circumference is nowhere.

Physical geography has often been treated as tho it were equivalent to the "science of geography," as Strachey has defined it, or as synonymous with the "general geography" of the Germans. It is not to be set over against either descriptive or areal geography. Surely the adjective may well have here a restrictive influence, limiting the subject to physical as distinct from biologic phenomena. With this restriction we may set the divisions of geography in the following scheme:

Chorographic geography.

Physical geography, with its sub-heads of the geography of the planet, the geography of the air, the geography of the sea, and the geography of the land.

Biotic geography, the distribution of animals and plants.

Anthropic geography, the geography of man.

The chorographic member, dealing with position, direction, and dimension, is the rudiment from which the entire body of geography has developed. The map, its first product, remains its chief vehicle of expression. The leading American geography of twenty-five years ago touched the high water mark of topography. On the continent of South America its map questions required a knowledge of nine capes, forty-eight cities, and thirty rivers. The boy who knew his lesson in Guyot could tell you that the leading affluents of the Orinoco are the Venturi, Coroni, Auraca, Meta, and Guaviari rivers. Today the pupil of Frye escapes from South America with the burden of but one cape, eleven rivers, and twenty-five cities—a total of thirty-seven place-names of these three kinds, as against the eighty-seven which his father learned in Guyot. The space saved by this shrinkage of chorography is largely given in recent texts to the physical side of the subject. Our "advanced" school geographies open with a compend of physical geography, and a wealth of physiographic matter is scattered with free hand thruout the text. In the high school our science is commonly reviewed as a distinct study.

In its opening chapter on the geography of the planet, physical geography borrows freely from astronomy. Its viewpoint, however, is geocentric. No fact or theory is introduced except in direct and important relation to the earth.

The geography of the air is conterminous with meteorology. It

draws upon the principles of physics, but the geographic content is as indispensable as is the physical, and it would be futile to attempt their separation. Under whatever name meteorology is taught, it should have a large place in school programs, so many and vital are our relations to this ocean of air at whose bottom we dwell, so fundamental are its effects on land forms, so immediate are its controls of the distribution of life, and, especially, so valuable is the discipline in observation and reasoning which it imparts. It deserves place in the high school as an independent study.

As the geography of the sea is of minor importance to our theme, we may pass at once to the pith of physical geography—the science of land forms, or geomorphology, as it is technically termed. It is here that our science presents the largest range and variety of phenomena. It is here that its relations to life are most direct and complex. So central, indeed, is this portion of geography that the other divisions may be grouped about it in subordinate relations. It is called by Penck “the main part of geography proper.” The masterly treatise of de Lapparent, *Leçons de géographie physique*, is geomorphology pure and simple from beginning to end. Is this distinguished geologist of France biased by his profession? Well, here then is Boulangier, who, in his *Traité de géographie physique*, reassures his readers that he is not a geologist, and yet defines his subject as “the methodical and rational study of the surface forms of the planet.” Wagner excludes from our science both anthropic and biotic geography, while Supan admits only the latter of the two. Davis has given us, under the name of physical geography, the completest and most luminous account of land forms in the language, but he introduces everywhere applications to the life of plant, animal, and man, which in European texts are commonly omitted.

Geomorphology is the child of geology and geography, and it inherits its father's strength and its mother's beauty. From geography it brings the “half artistic” description of the features of the earth and their distribution; from geology it brings the reasoned processes of their formation. Just now it seems to be an educational question as to which of the parents the child should be given in keeping. Should land forms be taught in the secondary schools as physical geography or as geology? This is perhaps the most important question raised by my subject. It involves the relations of the two sciences and their educational values.

The overlap land of geomorphology may be claimed by geology with as sure a right as any of its other provinces, such as palæontology. It was by geologists that it was explored. The Committee of Fifteen accredits the advance in scientific geography to the work of geographical societies, and to a limited extent this is true, especially in Great Britain. And yet, as one of the foremost British geographers, H. R. Mill, has stated, it is “the recent work of three geologists, Penck, Davis, and Lapparent, that

has brought this aspect of the relation between geography and geology boldly to the front." The list of the founders and leaders of the American school of physiographic geology is quite too long for mention, but I cannot omit the names of Powell, Lesley, Gilbert, Davis, Dutton, McGee, Chamberlin, Russell, and Tarr. How large, too, have been the contributions of foreign geologists, such as Ramsey and Geikie; Richtofen, Heim, and Penck; Noe, Lapparent, and Margerie. If some of these, as Penck and Davis, to the latter of whom Lapparent attributes "the preponderating influence in the development of the new concepts," are officially known as professors of physical geography, they nevertheless belong to the "brotherhood of the hammer." The attention of geology was early diverted from the study of land forms, but it brings to it on its return a wealth of material which more than compensates for its absence.

The reports of the United States Geological Survey contain a body of physiographic information and doctrine unequalled in the publications of any society. Our recent state surveys show the splendid result of the application of the method of the geologist to the study of reliefs, as the work of Salisbury in New Jersey, Calvin in Iowa, and Marbut in Missouri testifies.

The new geology describes the forms of the land with a precision and detail before unknown. It refers them to their places in a genetic classification. It assigns them to their order in an evolutionary life-history. Furthermore, it reads in them the story of the past. It not only explains the present by the past, it also reveals the past by the present. The physiognomy of a region is one of the records of its geological history. While the geomorphologist requires the special equipment and competence of the geologist, it is no less true that the geologist must now perforce be a geomorphologist.

In the geological courses now offered in the American universities the study of land forms has a large and increasing place. It is given under different names, but with essentially the same content. In these schools, with one notable exception—Harvard University—it is only in the lecture-rooms and laboratories of the departments of geology that the student of land forms can obtain adequate training. "The surest foundation," as Richtofen has said, "for the study of geography is geology, in its whole compass, as being the only means to an understanding of the earth's surface." In advanced instruction and in investigation geology occupies the field.

Of the three variables of which land forms are functions, as Davis has pointed out—structure, process, and time—the former is an unquestioned geological subject, while the second has always been treated under dynamic geology. The cycle of time, "that unmeasured part of eternity," during which process produces upon structure the evolving series of topographic forms, surely belongs in part to the science which deals with the past

history of the earth. As Sir Archibald Geikie once said in reply to the president of the Royal Geographical Society, who had drawn the line between geography and geology at the dawn of history: "If you take away from the geologist the study of all that is taking place now, and maintain that this study is not geology, but physical geography, he will answer: 'I do not care what you call it. I must be at liberty to investigate the processes which are now in operation in order that I may be able to explain what has happened in past time.'"

It really makes but little difference what you call it, and yet these questions of the relations of physical geography to geology in research may, after all, some time settle the matter as to which of the sciences shall chiefly teach land forms in our high schools. Fortunately certain criticisms of each science as a secondary study have been laid by recent educational progress. In view of recent texts, physical geography can no longer be called hash, nor can geology be called dry and dull. Neither science is dull except to the dullard. So large is the place of land forms in both that it is now little more than a question of approach to a common content of knowledge.

Let me claim for geology the easier path of approach, the clearer and more natural method of presentation, the greater coherence, and the vaster and more inspiring view. The geological path is that of process. It studies the agents now in operation with the resulting forms that are produced at each stage in the evolutionary cycle, and thus binds cause and effect as closely together as possible. The geographic path is naturally that of form, tho in a number of physical geographies this is abandoned and the geological approach frankly taken in its stead, this portion of the text being practically an epitome of dynamical geology. It is, perhaps, owing to the personal equation that to me the classification by form seems somewhat miscellaneous and scrappy. It throws together, for example, features as diverse in origin as the glacial plains of Iowa, the base plains of Russia, the lava fields of Oregon, the old lake floor of the Red River of the North, and the coastal plains of the Gulf. Supan is compelled by his arrangement to take up the glacier under three of the five great subdivisions of his physical geography—under the atmosphere, where the general description of it is given; under the dynamics of the lands, and under the morphology of the lands. Such a classification is of unquestioned value to the advanced student. But to the boy in high school is it so good a way as that of geology, which, in the glacier for example, draws from meteorology its climatic conditions and from geography the description of its features, and then proceeds directly to tell of its work and of the forms it sculpts and molds? Even in university work it has sometimes seemed well, as at Cornell University, New York, to precede physical geography by a year in geology.

Geology also gives what a painter would term atmosphere, or, better,

perspective, to this common body of knowledge. To an extent this is done in physical geography; more effectively done, I admit, in one or two of the recent texts which emphasize the geographical cycle, than it is in the conservative geologies. But these time conceptions are enlarged and vivified by the detailed study of geological history. It is well to know the geography of the Alleghany mountains; it is better to know their morphogeny; it is best of all to set the whole in geological perspective, to view their folding in the remote close of the palæozoic, and their long waste during the middle age of geology to a plain whose gradual dissection during subsequent cycles after uplift has sculptured these mountains to the forms we behold today. It is something also to set to the credit of geology that it teaches the history of organic evolution. Perhaps the writers of texts have not learned to paint the panorama of creation so that its salient features are not smothered in detail. But to know what the earth is we must know what the earth has been. The story of the planet and the life it has sustained is prerequisite to a complete understanding of the earth sciences and the life sciences as well.

As an educational instrument, geology has the advantage of concentration and homogeneity. If, like mathematics, it lacks the warm human interest, the applications of geography to human life, on the other hand, its current is not shoaled by division into numerous channels. If either physical geography or geology must be omitted from a crowded high-school course, let it not be the more fundamental, the more coherent, the more disciplinary of the two.

What, then, should be the place and sequence of the earth sciences in secondary programs? Can they be arranged so as to include the outlines of all, and without repetition? It seems to me that certain changes are desirable to secure this end. I should like to see nature study so enlarged in the lower grades that the common physiographic processes early become familiar. There is an evident trend toward the enlargement also of physical geography as an introduction to advanced geography. This seems to me the proper place for the study; but while the treatment of all essential forms and processes which bear directly on the life and work of man should be set forth clearly, all matter irrelevant to this may be omitted. I should like to see the areal and descriptive geography which follows so enlarged that it may take the place in the American high school which it occupies in the German secondary schools. Each geographical unit, each national domain, may then be treated thoroly in all departments of the science. With the physical environment everywhere basal, we need not fear to give anthropic geography the largest possible room. It may be that much might be brought in which a strict definition of geography would exclude. In inexperienced hands, however, all this wealth of detail relating to man and his work becomes a veritable rag-bag, whose bright bits of color are not even sewed together into a

patterned patchwork. But with due selection of material, with grasp of principles, with historic perspective, and especially with a thoro knowledge of physiographic controls, the wise teacher of geography can afford to take as his maxim: "I consider nothing alien to myself which relates to man." The extension of anthropic geography, however, cannot be brought about by discussion, criticism, and the writing of text-books. It must come in precisely the same way as the development of physical geography, by scientific research. It awaits the masters who will some time do for the sciences relating to man all that geology is doing for the science of land forms.

The proper place for physical geography is preliminary to the areal geography which applies its principles and consequences to special regions. To review it later as an independent high-school study would seem then unnecessary. Instead, let the course in the earth sciences conclude with meteorology and geology. The earth sciences may thus be so closely articulated as to form the vertebral column of secondary scientific instruction. So close is their touch with human life, so thoro and comprehensive is their discipline, so simple, so natural, so rational, and so real is their culture, that their extension only awaits their connection into one continuous line of study.

DEPARTMENT OF SCHOOL ADMINISTRATION

SECRETARY'S MINUTES

FIRST SESSION.—WEDNESDAY, JULY 10, 1901

The sixth annual meeting of the Department of School Administration was called at the Central High School, Detroit, at 3 o'clock P. M.

In the absence of President W. S. Ellis, of Anderson, Ind., Edward F. Marschner, president of the Detroit school board, was selected as temporary chairman.

After welcoming the department, Chairman Marschner introduced Miss Esther St. John, who sang the following songs: (a) "The Rose," *Noel*; (b) "The River and the Sea," *Johnston*.

Hon. L. D. Bonebrake, of Columbus, O., read a paper on "The Centralization of Rural Schools."

He was followed by a paper on "Schoolroom Temperature and Humidity," by William George Bruce, editor of the *American School Board Journal*, Milwaukee, Wis.

A paper on the "Relation of State Legislation to Modern School Building," by C. H. Parson, of Des Moines, Ia., followed.

The chair then introduced Mr. M. R. Marr, of the Detroit school board, who extended a cordial invitation on behalf of that body to the department to spend the following day as the guests of the Detroit school board on the steamer "Sappho."

The chair then appointed the Committee on Nominations, consisting of:

H. S. Prophet, Lima, O.

Harlan P. French, Albany, N. Y.

Fannie G. Gies, Austin, Minn.

A motion was made and adopted authorizing the president to appoint a committee on legislation, to consist of one member from each state and territory of the United States, whose duty it shall be to promote legislation for sanitary school buildings, as outlined in a paper read by Mr. C. H. Parsons.

SECOND SESSION.—THURSDAY, JULY 11

(On board the steamer "Sappho")

At 10 o'clock A. M. the members of the department boarded the steamer "Sappho," and after a twenty-mile journey landed on the island Bois Blanc, where a dinner was served. After a half-hour's stroll on the island the members boarded the steamer again for the return trip and organized for the second session.

The meeting was called to order by William George Bruce, who introduced Vice-President Peres as the presiding officer.

Mrs. Josephine Ahnefeldt Goss, of Grand Rapids, Mich., read a paper on "The Value of Truant Schools."

This was followed by a paper on "What Constitutes an Efficient Superintendent?" by Israel H. Peres, of Memphis, Tenn.

The Committee on Nominations then made the following report:

Your Committee on Nominations begs to report the following list of officers who shall serve during the ensuing year :

President—Israel H. Peres, Memphis, Tenn.

First Vice-President—Mrs. Josephine A. Goss, Grand Rapids, Mich.

Second Vice-President—Edward F. Marschner, Detroit, Mich.

Third Vice-President—L. D. Bonebrake, Columbus, O.

Fourth Vice-President—Dr. Ella J. Fifield, Tacoma, Wash.

Fifth Vice-President—George Fenton, Broadalbin, N. Y.

Secretary—William George Bruce, Milwaukee, Wis.

Executive Committee—Chairman, C. H. Parsons, Des Moines, Ia.; M. R. Marr, Detroit, Mich.; Hon. Samuel B. Huey, Philadelphia, Pa.; Dr. J. V. Gallivan, Boston, Mass.; Miles O'Brien, New York City.

On motion of John A. Diederichsen, of Milwaukee, the report was adopted unanimously and the officers were declared elected.

Mr. J. W. Holmes, of Alma, Mich., then suggested that at the next meeting of the department a paper be read on "What Constitutes an Efficient School Board?" He held that the efficiency of the superintendent frequently depended upon the competency of the board.

Mr. A. W. Elson said that in recent years school boards had manifested a tendency toward appreciating in a more sympathetic way the children's side.

Harlan P. French paid a tribute to the Detroit school board for taking such a keen interest in the work of the department.

Mr. M. R. Marr discussed the truancy problem and described the manner in which the subject was treated in Detroit.

Mr. Carpenter, of the Grand Rapids Truant School, held that the first duty on the part of school authorities in managing truants was to inculcate a desire on the part of the boy to do better. As soon as a marked improvement is shown, the boy should be returned to his regular school.

Mr. Prophet then submitted the following resolution :

Resolved, That the Department of School Administration hereby extends its hearty thanks to the Detroit board of education as a whole, and to its members and officers individually, for the kind as well as unique hospitality extended to us.

Resolved, That these resolutions be spread upon the minutes of the department, and that a copy of the same be transmitted by the secretary to the Detroit board of education.

The resolutions were adopted by a rising vote.

A vote of thanks was also extended to the secretary of the department for his efficient and faithful services.

President Peres then announced that he would appoint the Committee on Legislation at an early date and announce the same thru the usual channels.

Adjournment followed.

WM. GEORGE BRUCE, *Secretary*.

PAPERS AND DISCUSSIONS

THE CENTRALIZATION OF RURAL SCHOOLS

LEWIS D. BONEBRAKE, STATE SCHOOL COMMISSIONER OF OHIO

The country-school problem is one of the most important now being considered by the educators of America. A study of the population of every state of the union will reveal a growing tendency toward urban life

as against a distinctively rural development. The cities are gaining in numbers and wealth at the expense of the rural communities. The factory, the shop, the store, the warehouse, the railroad, the paved streets, the distribution of water and light to every home, the contact with the news of the world and the markets, the construction of edifices public and private, the organized city school systems, the opportunity for social life, and other motives more or less apparent, have conspired to produce congested centers of population. Over against all these there have been the well-known isolation of the farm, bad roads, bad postal facilities, uninspiring church services, unorganized schools, low prices for farm products, and other matters more or less connected in thought and more or less recognized as important to the best of social conditions. Some of these tendencies were, in a way, recognized prior to the great Civil War ; but they have been increasingly recognized in the last forty years of our national life. For the purposes of this brief paper it is not necessary to discuss them in detail. Sufficient to say that statistics amply confirm the claim that the city is being developed, in a measure, at the sacrifice of the rural community, the hamlet, and the village. This tendency was first made manifest in New England, where farming has always been a difficult undertaking. Of course, the rich level lands of the West have invited many aggressive and ambitious young men to leave the older states ; and this also must be added to the tendency just mentioned. The traditions of the country school, with its one schoolmaster, with its twenty to thirty recitations a day, its small children learning the alphabet, and its larger children mastering arithmetic and grammar and geography, its go-as-you-please course of study, its rough-and-tumble discipline, its spelling classes, spelling bees, singing schools, debating societies, and all that, are not yet entirely departed from us. Their memory lingers ; and occasionally we find rural communities where such conditions obtain, reminding us of the early days of pioneer life and of our earlier American civilization.

But, on the other hand, we are constantly confronted with changing conditions. The log schoolhouse is fast disappearing ; and "the little red schoolhouse" is not what it once was. A network of electric railroads is rapidly providing inexpensive transportation facilities for those dwelling in rural communities. Cheap telephone service is rapidly finding its way to farmers' homes. The government is providing free rural mail delivery as fast as the resources of the treasury will allow, and soon our farmers will have added to their own rich inheritances many of those conveniences which are so much prized in cities and large villages. To such improving conditions we must add the grange, the farmers' institute, free circulating libraries, and not infrequently lecture courses and Chautauqua circles. But these are all comparatively recent in origin, and their full significance is not yet comprehended. They are good, hopeful

signs, however, of better rural conditions, and all have an educational and socializing tendency more or less pronounced.

How much they may do to reclaim our despoiled rural districts and fill them once more with that peculiar strength of character, that virility and soundness of judgment and patriotism, so long associated with rural America, I cannot say; but of this I am certain: they will tend to do away with the isolation of the farm, and bring some of the best things of the city to the country.

But what about the school system? Are there no hopeful signs for the farmer's boys and girls? My answer is that great changes in the schools of rural America are taking place, and at least three distinct phases are to be mentioned: first, better supervision, gradation, and inspection, which represent in a word what we call effective organization; second, township and county high schools, which represent enrichment and extension of the course of study; and third, centralization of schools and transportation of pupils, which stand for many matters which it is the purpose of this paper to point out in as brief form as possible.

Concerning the inspection of the work, it is proper to note that there are two or three types. County superintendency is one; township superintendency is another; and a district county superintendency is entirely possible where neither the larger unit of the whole county nor the relatively small unit of the single township is made the supervising district, and where the supervising unit consists of several townships grouped together as one district. The latter, a compromise arrangement, I personally consider as preferable to either of the others.

In the matter of rural high schools we have two types: the township high school and the county high school. The former I consider preferable, as the young people can sleep at home and be under the constant watchful care of their parents. The township high school will also reach the greater number, and respond more readily to popular demands.

As to the centralization of schools and transportation of pupils, there is much to be said. It is a part of the solution of the great rural-school problem, and a very important part. It has great possibilities. Centralization of schools means the closing of the small separate country schools and the gathering of the children of a township into commodious structures usually located near the center of the township. It also means the transportation of the pupils to the schools in comfortable conveyances. This phase of the country-school problem is provoking at present a great deal of serious discussion. A score of states now have laws touching this subject, most of them permissive in character.

The first law on the subject was passed by Massachusetts in 1869. The practice of transporting pupils at public expense had been in vogue for some years prior to that date, but it was not until 1869 that definite legislative sanction was accorded to the movement. Other New England,

western, and northwestern states have followed in giving it legislative sanction.

Some opposition has been met; some still exists. But the movement has grown to be general in character. That I may not speak unadvisedly or in lavish terms, I have deemed it best to speak by way of illustration of that movement in connection with my own state, as the history of Ohio is but the history of the movement elsewhere. And I know you will pardon the characteristic modesty of an Ohio man, as he seeks to give the "Ohio idea," now happily worked out in our midst, and in successful operation in many of our townships.

As early as the year 1872 centralization was discussed in some of the Western Reserve counties of northeastern Ohio. On p. 163 of Hon. Thomas W. Harvey's report of the school commissioner's department for the year 1872 there will be found the suggestion made by Mr. H. U. Johnson, one of the county school examiners for Ashtabula county, in the following vigorous recommendations:

That something must be done soon by way of re-districting the townships, or for providing for centralization of the schools in northern Ohio, is apparent to every careful observer. Our townships have from six to nine sub-districts, and very many of these schools are run, during the summer months, with from three to eight scholars. The winter schools are proportionately small. With this state of affairs, no person can create any great deal of enthusiasm in his school work, and the authorities do not feel that they can pay the wages that qualified teachers demand. As a result, all parties suffer. I am satisfied that some method of collecting the children of our rural districts should be devised by which they can all have the advantages of the graded school. Again, our school law should provide help for academies and seminaries in those communities where such schools are located, by allowing the people to tax themselves for that purpose. For a long time to come there will be a demand for the work done in this class of schools, and yet, as matters now stand, the remuneration is not adequate to the labor required.

Discussions of various kinds were indulged in for some years following. The conviction that the per capita cost was too great in many of the districts was clearly recognized. The small daily attendance prevented interest and enthusiasm. Many schools were inefficient. Finally, in 1892, just twenty years after the pertinent suggestion of Mr. Johnson was written, the real work of centralization was actually begun in Kingsville, Ashtabula county. The Kingsville township board of education, being confronted with the necessity of providing a new school building, boldly undertook to test the practicability of their convictions by providing transportation of pupils to a neighboring school. Their schools were small; the per capita expense was unduly large. The new plan was therefore given a trial, and their pupils were transported to a neighboring village. The success of the plan was manifest from the beginning, but its legality was questioned.

Accordingly, a special measure was introduced in the general assembly providing for the costs of transportation, and it became a law

April 17, 1894. The measure applied only to Kingsville township, Ash-tabula county, and reads as follows :

SECTION 1. Be it enacted by the general assembly of the state of Ohio, That any board of education in any township which by the federal census of 1890 had a population not less than 1,710 nor more than 1,715, of any county which by the same census had not less than 43,650 nor more than 43,660 inhabitants, may, at their discretion, appropriate funds, derived from the school tax levy of said township, for the conveyance of pupils in sub-districts from their homes to the high school of said township. Provided, such appropriation for any sub-district shall not exceed the amount necessary, in the judgment of the board, for the maintenance of a teacher in such sub-district, for the same period of time.

SEC. 2. This act shall take effect and be in force from and after its passage.

You will perceive how intimately the high school was associated with this first bill providing for centralization. It is gratifying to note that the complete system thus installed has, in a measure, set the pace for many other districts of the state.

After ten years of successful experience it is also a pleasure to report that the people are thoroly satisfied, and still adhere to their original conception of graded instruction for the children and a course of study leading from a primary department to a high school under their own management and control.

In time the leaven spread. Other counties and townships of north-eastern Ohio became interested, and in 1896, in the next succeeding general assembly, a second bill on centralization was passed, known as H. F. 830, and was for the relief of the counties of Stark, Ashtabula, and Portage. The wording of that measure is as follows :

SECTION 1. Be it enacted by the general assembly of the state of Ohio, That the board of education of any township district situated in the counties of Stark, Ashtabula, and Portage may, when in its opinion it will be for the best interest of the pupils in any sub-district, suspend the school in such sub-district and provide for the conveyance of said pupils to such other district or districts as may be convenient for them, the cost of such conveyance to be paid out of the contingent fund of said district; provided, the board of any special school district in any county mentioned above may provide for the conveyance of pupils out of contingent funds the same as township districts aforesaid.

SEC. 2. This act shall take effect and be in force from and after its passage.

Your attention is called to the provision of this bill which permits special districts, as well as township districts, to provide for conveyance of pupils out of the contingent funds at their disposal. You will notice also the provision whereby the board of education is to become the judge of the matter. It is not necessary to refer the question to the people for a vote. The board decides that question for the district.

Another two-year period followed, and again the general assembly of Ohio was in session. Such was the success of the measure for the counties of northeastern Ohio that the demand was general for a law which would apply to the entire commonwealth.

Accordingly we find that the general assembly on April 5, 1898, passed a bill amending section 3921 of the Revised Statutes so as to give

to any township board the right to suspend any school where it was deemed necessary and provide transportation for the pupils. This very important law reads as follows :

SECTION 3921. A map of each township district shall be prepared by the board, as often as it may be necessary, in which shall be designated the numbers and boundaries of the sub-districts thereof; the board may at any regular session increase or diminish the number or change the boundaries of sub-districts, or may, when in its opinion it will be for the best interests of the pupils in any sub-district, suspend the school in such sub-district, and shall provide for the conveyance of said pupils to such other district or districts as may be most convenient for them, the cost of such conveyance to be paid out of the contingent fund of said district; and any such sub-district which may be established by act of the general assembly shall be governed by the provisions of this title, except that it cannot be changed or consolidated by the board within three years after its formation, unless the written consent of two-thirds of the electors residing in the territory affected by such change is obtained.

SEC. 2. That section 3921 of the Revised Statutes of Ohio be, and the same is hereby, repealed; and this act shall take effect upon its passage.

Under the general provisions of this law twenty-three townships are reported as being centralized, and I am satisfied that many more are partially centralized—how many I am unable to say, owing to imperfect reports.

In the session of the general assembly of 1900 another general law bearing on centralization was passed. It does not in any way modify the section just quoted, but it permits a different style of centralization; and already several townships have taken advantage of its provisions.

In substance the law of 1900 defines "centralization" as being a system of schools in a township providing for the abolishment of all sub-districts and the conveyance of pupils to one or more central schools. By its terms it permits the township board of education to submit the question of centralization to a vote of the electors of the township, and upon the petition of one-fourth of the electors the board must submit the question to a vote. Methods for providing a new central school building are outlined, a graded course of study is required, and permission for a township high school is given. One of the noteworthy provisions is the abolition of the boards of sub-directors and the election of a township board of five persons elected at large, the township clerk and treasurer acting *ex officio* as clerk and treasurer.

This composition of the board will prevent deadlocks. In so far as applicable, the village school laws of the state are to govern the schools, and said laws by common consent are among the best we have on our statute books. Already several townships have arranged to place their schools under this new law, and inquiries recently sent out bring three replies, which follow :

1. We are very favorably impressed; we expect better schools.
2. It gives satisfaction.
3. It works very satisfactorily.

Now, in a general way let me summarize the conclusions reached by correspondence in Ohio and in other states. No attempt at accurate statistics is made. There is too much detail, and this is not the time or place to give figures. A committee of careful and judicious educators appointed by the National Educational Association can get much valuable information by compiling available material gathered from all the states of the union. Ohio will contribute its full share; so will Massachusetts, Indiana, and many other states.

The movement toward centralization is generally approved in farmers' conventions and by the Grange. The farmers of America wish their children to be well educated, and once thoroly convinced of the practicability of the new movement they will give it a fair trial and respond to all demands put upon them. In closing let me summarize:

1. Centralization encourages the growth of high schools, thereby giving the country boys and girls an equal opportunity of receiving advanced training with those that live in cities and villages.

2. Centralization encourages supervision and inspection of all work done, thereby encouraging definiteness of aim and securing full return for money spent.

3. It permits better grading and classification.

4. It encourages an enrichment of the work, often giving to the pupils of the township music, drawing, and other special branches under special teachers elected by the township board of education.

5. It fosters township libraries and provides ready means for the distribution of good literature to both young and old.

6. It invariably insures better teaching, and generally it brings to the teacher more and longer terms of employment.

7. It invariably operates to keep the larger boys and girls in school, when otherwise they would be content with meager preparation for life.

8. It brings to the people of a township a certain community of feeling, a certain companionship and charity, which otherwise would hardly be possible. Sectarian and political differences are not so noticeable under the new as under the old régime. The people get better acquainted; and frequently the same wagons which transport the children to school in the daytime will at night transport their parents to lectures, concerts, and other social gatherings.

9. The improvement in apparatus, laboratories, charts, blackboards, desks, furniture, heating apparatus, toilet arrangements, and matters of like kind is quite apparent. The board of education having but one building to paint, or shingle, or repair, naturally also there is saved much current expense.

10. The school attendance is invariably much more regular, is of longer continuance, and teachers are very little annoyed with truancy and tardiness.

11. The cost of maintaining the school, including transportation, differs according to local conditions, and reports are made sometimes showing more expense than under the old plan, and sometimes less. One of my enthusiastic friends reports that he would rather have one month under the new conditions for his children than a year of the old.

12. The health and morals of the children usually are guarded better by the new method than by the old; the children are happier; they are better taught, and the people get larger returns for their money.

SCHOOLROOM TEMPERATURE AND HUMIDITY

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We have reached a period where the schoolhouse has become more than a mere gathering center or a shelter against the elements. We have come to recognize that its very walls are a factor in the educational growth of the child. We regulate its appointments in order that they may bear the largest educative influence upon the inmates, and also protect their physical welfare as a prerequisite to intellectual advancement.

Until a few years ago the essentials of a schoolhouse were few. Today we discriminate among a variety of systems of heating devised by able engineers. Ventilation has been reduced to an exact science. Schoolroom lighting is thoroly understood and correctly applied.

In drawing comparisons between the old and the new schoolhouse some school-board members are apt to lapse into the belief that the crude structure of former days, with its meager equipment, will suffice for today. Others reason that the modern schoolhouse is too expensive.

One might as well argue that the wooden plowshare of ancient times will serve as well as the steel plow of today, or that a tallow candle will shed as much radiance as an electric light. The boy of today requires a better mental equipment for the battle of life than did his forefathers. The general progress in all lines of human activity will make greater demands upon the young man of the future. Thus, not only the modern school, with its well-devised courses of study and educational methods, but the schoolhouse as well, is the result of advanced conditions.

One of the peculiar features which have developed in my inquiry on temperature regulation in schoolhouses is the tendency to confound it with another subject. It would seem unnecessary to explain that heat regulation pertains entirely to a system by which temperature is controlled against excessive heat or excessive cold. It would seem equally unnecessary to explain specifically that ventilation pertains to the induction of fresh air and the removal of foul air.

While everyone knows this, we find many school officials who do not

differentiate temperature regulation from ventilation. No doubt, if asked point blank to define the difference between temperature regulation and ventilation, a correct answer would be received in each instance. It is not ignorance, but thoughtlessness, that causes the misconception. It is one thing to provide a class-room constantly with fresh air; it is an entirely different thing so to regulate the air that it is neither too warm nor too cold. Thus, let us bear in mind the wide difference between ventilation and temperature regulation.

A discussion of the subject of temperature regulation can only result in beneficial results. If school officials have hitherto occupied their minds with the various kinds of heating systems to the exclusion of temperature regulation, it is because the latter has not been urged upon them with any considerable pressure. Busy men—busy in their several vocations in life—do not always find it convenient to give the time necessary for a thoro study of all the things that ought to go into or about a schoolhouse.

In the modern schoolhouse artificial heat need no longer be measured out extravagantly or penuriously to discomfort or danger. It can be placed under automatic control by simple devices—insuring economy and protecting the health of the pupils.

An even temperature at a certain degree is conducive to the growth of plant and animal life. Vegetable and animal foods owe their prolonged preservation to an even temperature.

An apple picked in October of last year and found in fine flavor and juice in the month of June this year owes its wonderful preservation to nothing else than an even temperature. The qualities of the apple have been prolonged by the control of natural elements. In the same manner has the growth of the strawberry which reaches the market in the month of January been hastened by surrounding it with a temperate atmosphere. Temperature extremes hasten the death of both plant and animal life.

It may be claimed that a variation of temperature is conducive to hardihood. Under certain conditions, yes. A child may withstand extreme cold while engaged in healthful exercise. Under certain conditions extreme heat may be borne without injurious effects. When the body, however, is inactive, a variable temperature is harmful. Thus an overheated as well as an under-heated schoolroom may do incalculable injury to the child.

The automatic control of schoolroom temperature involves primarily the question of finance. The great majority of schoolhouses in the United States require artificial heating during seven months in the year. The fuel expense in cities and towns, where large buildings must constantly be kept warm, is a heavy one. The consumption of fuel is steady and constant during certain periods of the year—continuing year after

year. Thus any slight daily reduction in fuel consumption may prove a considerable saving at the end of a month or a year. The saving of a few hundred dollars in the purchase of a school site or the erection of a school building offers no comparison with the aggregate saving accomplished in a daily reduction of the fuel expense. Every degree of excess heat represents that much waste.

Temperature regulation in the schoolroom, however, is a simple proposition. It requires no expert mathematician to measure its material advantage, nor a medical expert to determine its hygienic qualities. A few things only need be considered. If the outdoor temperature is fifty degrees, and the school temperature should be seventy degrees, only twenty degrees of artificial heat is required to make the schoolroom comfortable. Consequently the fuel expenditure should cover twenty degrees only. That which goes above this is waste, and consequently extravagance. An open window to cool off an overheated room is an unwarranted exposure of the school occupants to coughs and colds, which may lead to serious results. No school board has the right to endanger the physical comfort and welfare of pupil or teacher.

The fuel expenditure should cover only the difference between the outdoor and indoor temperature. This may vary all the way from zero up. Variation may be constant. The most attentive janitor may miss his firing by several degrees of the temperature desired or required. In the forenoon the outdoor temperature may be forty degrees; in the afternoon, fifty degrees. Consequently thirty degrees of artificial heat are required in the forenoon, and only twenty degrees in the afternoon. The janitor may anticipate the changes in temperature. The chances are that he will not. The surplus heat has either escaped thru the chimney with the janitor's aid, or thru the schoolroom window with the teacher's aid. A well-adjusted mechanical device would regulate the temperature from minute to minute without human aid, and regulate the fuel consumption accordingly. Even a few degrees of excess heat will make a vast difference in the aggregate of fuel consumption for the year. Therefore an accurate adjustment of fuel consumption must effect a saving in the fuel expense.

The physical welfare of the teacher and pupil cannot be treated as a secondary consideration. In fact, if it is admitted at all that hygiene is a factor in schoolroom temperature, it follows that it is one that must preclude monetary considerations. Therefore, if a system of temperature regulation will effect an actual saving in dollars and cents, sufficient to pay its installment in a few years, the advantage is a double one. Were this not the case, the hygienic proposition involved would alone be sufficient to warrant a recognition of the advantage derived from a heat-regulating device.

The subject of atmospheric humidity, or air moisture, and its relation

to health has thus far received little or no attention at the hands of school authorities. While the subject is an important one, but few data have been collected. The scientists who have entered this field of investigation contend, however, that for certain classes of invalids the degree of humidity of the atmosphere is of more consequence than the variability of temperature, no matter how sudden or sharp the variation may be. Yet it is held that medical literature is almost entirely lacking in a scientific explanation of the effect of the different degrees of humidity upon the animal economy.

Dr. W. M. Wilson, director of the United States Weather Bureau, who has given the subject careful study, says :

It is safe to assume that during the winter months the normal relative humidity in lake cities is 72 per cent., and the average diurnal range is from 60 to 72 per cent. From observations with respect to moisture in business offices and living-rooms heated by steam, hot water, and hot air, it is safe to assume that the average relative humidity in artificially heated dwellings and offices in the winter months is about 30 per cent., or about 42 per cent. less than the average outside humidity, and drier than the driest climate known.

The evaporative power of the air at a relative humidity of 30 per cent. is very great, and when the tissues and delicate membranes of the respiratory tract are subjected to the drying process, a corresponding increase of work is placed upon the mucous glands in order to keep the membranes in proper physiological condition. Nature in her effort to compensate for the lack of moisture in the air is obliged to increase the functional activity of the glands, and this increase of activity and the frequent unnatural stimulation, induced by the changing conditions of humidity from the moisture-laden air outside to the arid atmosphere inside our dwellings, finally result in an enlargement of the gland tissues, on the same principle that constant exercise increases the size of any part of the animal organism. Not only do the glands become enlarged, but the membrane itself becomes thickened and harsh, and sooner or later the surface is prepared for the reception of the germs of disease, which tend to develop under exposure to the constantly changing percentage of humidity.

The medical authorities tell us that the "physiological symptoms of an atmosphere too dry are parched lips and tongue, a dry, feverish condition of the skin, and, in those children predestined to lung diseases, a hacking cough, resulting from the desiccating effect of excessively dry air on the lungs and bronchial tubes."

A mummified and shriveled appearance of the human skin is caused by a dry atmosphere. The ruddy complexion and red cheeks of English men and women are due to air moisture. The importance of aqueous vapor as a constituent in our atmosphere was not exaggerated by Tyndall when he startled the scientific world by the announcement that "the removal, for a single summer night, of the aqueous vapor from the atmosphere which covers England would be attended by the destruction of every plant which a freezing temperature could kill."

On the economy of fuel consumption achieved by controlling humidity in the schoolroom I can do no better than quote Director Wilson again. He says :

A humid atmosphere is economical. In a room in which the temperature is 72 degrees the temperature of the wet-bulb is 54.5 degrees. If a room with a sensible temperature of 54.5 degrees is considered comfortable, the same result can be attained by heating to only 60 degrees, and supplying sufficient moisture to raise the humidity to 70

per cent., which still conforms very closely to the normal condition of the outside air, so far as moisture is concerned. It would probably be impracticable to maintain uniformly a relative humidity of 70 per cent., especially with a low outside temperature, as the condensation upon the windows would be undesirable; but by heating to 65 degrees the relative humidity could be held at 50 per cent. without any ill effects, except possibly on extremely cold days. Competent engineers estimate that about 25 per cent. of the cost of heating could be saved by holding the temperature at 60 degrees and raising the humidity to 70 per cent., still maintaining a wet-bulb temperature of 54.5 degrees, the same as that obtained by heating to 72 degrees under ordinary conditions. But to be conservative and avoid the possibility of any unpleasant results from condensation, our dwellings could be heated to 65 degrees with a relative humidity of 50 per cent., and still save from 12½ to 15 per cent. over the present cost.

The question which naturally arises in a discussion of this subject is whether humidity can be brought under mechanical control. Or, rather, can atmospheric moisture be supplied artificially to the extent that it may be desired? The need of a larger quantity of moisture in schoolhouses heated by artificial means is recognized, but the difficulties encountered in solving the problem have, it is claimed, largely deterred practical research in this direction.

But here the triumph of the scientist must again be recorded. Recognizing that a humidifier is as necessary to a first-class heating plant as is a temperature regulator, the inventive mind has also brought atmospheric moisture within automatic control and regulation.

It remains for the authorities who govern the practical affairs of the American schools of the present day to avail themselves of the modern appliances whose efficiency has been satisfactorily demonstrated.

RELATION OF STATE LEGISLATION TO MODERN SCHOOL BUILDING

C. H. PARSONS, DES MOINES, IA.

One year ago at Charleston, in treating of the subject of "School-house Architecture," I made this statement: "Each state should pass laws requiring that every schoolhouse should measure up to a certain sanitary standard;" and in the practical experience of the year since, as an architect, in the designing and construction of many schoolhouses, making a specialty of this class of buildings, I have become firmly convinced that no permanent, satisfactory solution of the modern school building can ever be attained even in the most enlightened of our communities that does not comprehend the remodeling of state laws so as both to enable and require school boards to produce certain definite and specific results in the school buildings under their control.

In discussing this subject before you today, I recognize that your actions and efforts to produce satisfactory results in the building of new

school buildings are controlled and regulated in each state by state legislation. I also know that most of you who are here today represent school boards of the larger cities, and that many of the difficulties of which I shall speak do not exist to the same extent in your communities as they do in smaller towns, villages, and rural districts. On you who know the value of modern sanitary school buildings devolves the burden of taking the initiative in securing the necessary legislation to enable all communities in your respective states to have the same privilege that you enjoy.

The school buildings that our fathers built are not sufficient for our needs today; the legislation that produced the schoolhouse of the past is not comprehensive enough to create the needed modern school building of today. As conditions change in our evolving and unfolding modern civilization, laws must be made broad and comprehensive enough to make possible an intelligent solution of all arising problems.

Occasionally in some out-of-the-way place, where the influences of modern progress have been but lightly felt, some member of a school board will say to me that when he went to school no attention was given the question of sanitation that is so necessary to the health and comfort of the child in the crowded twentieth-century school building of today, and that they enjoyed good health, too; and then he thinks he has defeated by a statement of one fact all argument in favor of schoolhouse sanitation, when in fact his statement has only called attention to changed conditions and to the necessity of their intelligent treatment.

In the years that our fathers went to school the attendance was small and the school year short, thus leaving more than double the time that is now given for outdoor exercise, physical work, and the upbuilding of a vigorous constitution; while we today have to accomplish this result by artificial means. Our children are confined to the schoolroom from eight to ten months in the year; the rooms are not built larger than necessary to accommodate the attendance. In order that the present generation of children may have the proper supply of fresh air, it must be brought to them thru artificial means of ventilation.

There are conditions existing in most of our western states that imperatively demand enabling laws. The conditions are these:

The school population is increasing all over the West faster than the taxable valuation of municipal property. In almost all of our western states the laws limit the amount of money that can be voted for the purpose of building a schoolhouse to a certain percentage of the taxable valuation of the property of the district. In some of these states the limit is as low as 4 per cent., and in these same states the assessed valuation of the property ranges from 25 per cent. to 50 per cent. of the actual valuation, and thru kindness of the assessor in most of the communities the valuation will usually be very much less than one-fourth of the actual value.

The result has been that, when a town finds that it needs a new school building, it finds at the same time that it cannot legally raise money enough to build the building that it needs. The result of this in some of the western states is that there are very few schoolhouses built in which the board does not have to violate the law in order to secure the bare necessities of the building. This condition is at the present time worse than it has ever been in the history of this territory of which I speak, owing to the fact that during the recent period of depression, or "years of hard times," as we are wont to term them, the assessed valuation of all property was run down very low; and since times have changed and prosperity has again struck our fair western land, there has been no effort made to increase the tax valuation, while, on the other hand, material and labor prices have kept advancing, until today it takes from 50 to 75 per cent. more to build a school building than it did during those years of adversity. The result is that a school board will go to some place and see a school building that was built in the years from 1894 to 1897 and ascertain its cost. They go home and decide to build a similar schoolhouse. They should have just as good a schoolhouse, and in fact better, because we know more about building schoolhouses today than we did five years ago. They undertake to build it, and, if the old house cost \$10,000, they find that the new one will cost \$15,000 or \$16,000. What is the result? The board has so many children to provide for; they must have so much floor space in order that they may accommodate the number of children. They go to work, and the instruction to the architect is to cut out every ventilating flue in the house; to take off and out every provision for sanitation that costs any money; to strip the building of every adornment and ornamentation that goes to produce an artistic schoolhouse; and when they have finished their reductions they still have to violate the law to some extent to complete it; and instead of a modern school building they have a house that is no better in its sanitary features than we were building twenty years ago, while in appearance it is a thing that the community and architects are all ashamed of. The board is not to blame for this, for they have done everything they could do; the architect is not to blame, for he has put into the building everything and more than the board had money to pay for; the evil lies in the law. What we must have is laws to enable our communities to build the schoolhouses they need.

It is necessary, I presume, for state legislatures to throw around their acts a certain amount of caution. I presume that it is necessary for them to limit, to a certain extent at least, the amount of indebtedness that a community can assume; but I do not believe that it is necessary for any legislature to pass such laws as say to a local community that it cannot be trusted in the handling of its own resources, and in this way entirely thwart the development of the public-school system. We need more

liberal legislation for the purpose of enabling boards in the villages and smaller towns to supply the necessary facilities for the proper conduct of their schools.

Taking up the second point, that of compelling legislation, I will say that we find in many of our communities the following conditions existing :

The architect will go into the town upon the call of the school board that is looking for plans for the new school building, and will lay before them the things that are necessary to make a modern school building a success ; he will show them the necessity for ventilation, proper lighting, sanitary closets, easy stairways, and all of those things that go to make up a satisfactory school building ; and he immediately finds that the board is possessed of a commercialism that prevents them from ever adopting any of these ideas because they cost some money. You may lay before them the necessity of the thing in order to preserve the health of the children, and it does not appeal to them. They frequently think that it is the foolish vagary of an architect that knows too much. Now, when I am describing this board to you today, I am not speaking of an ignorant board. Such a board is frequently found composed of the best men of our most progressive communities. If you go into their stores, their workshops, their factories, or their offices, you will find them equipped with all the modern devices of the age for the accomplishment of the best results in their special pursuits. They are in no sense ignorant ; they are men of intelligence and ability ; they are men who, if they were building a house for themselves, would build it in the best way possible ; but when they go on a board of education, they are so conservative or economical in the handling of the funds of the district that they will not pay one cent for things that look like fads to them. They will frequently say : " Why, I have a good house and it is not ventilated. " Probably in that house of theirs, with three or four occupants, you will find more cubic feet of air than with the best system of ventilation can be given to a school-room for sixty pupils. Argue as you will, lay before them the necessity of the case, and show that there must be greater provision made for the ventilation of a room in which there are sixty pupils than for one in which there are six ; you cannot influence their minds ; and when the result is reached, you will find that the board has turned down the provisions for ventilation as being extravagant.

The result is that when we get thru erecting a school building under the control of a board like this, they have a ruined house. The teachers cannot reach these men, because with them the commercial instinct is developed to such an abnormal extent that they look upon the one that is teaching school as being entirely impractical and incompetent to deal with these problems. Even if the school-teacher is well read and well posted on the subject of modern schoolhouse construction, and if he

offers to give any advice to his board, the chances are that the president or some member of the board will politely inform him that he has been employed to run the school and not the school board. The question is how to deal with cases of this kind. The architect cannot control them, the teacher cannot persuade them, and there is only one thing that they will respect and bow to, and that is the law. To meet these cases, we need compelling legislation; we need legislation that requires every set of schoolhouse plans, before they are used for the construction of the building, to be examined and approved by some competent authority. The law should designate just how much air should be supplied in a given length of time to each pupil confined within the limits of a schoolroom. We need to have attached to this law fines and penalties in proper amount so as to make the authority of the law respected. When this is done, indifferent school boards and incompetent architects will cease ruining public-school buildings. These measures that I am advocating are not new, for some states already have them in existence. Massachusetts requires these standards for all of her school buildings, and enforces her laws by the police power of the state.

I have now outlined the difficulties; I have at the same time suggested remedies. The difficulties are of a twofold nature: first, boards that do desire to build sanitary school buildings cannot do so for the lack of funds; second, many boards that could build proper school buildings do not do so for the reason that they cannot be made to realize the necessity. The first may be cured by means of enabling legislation, that is, making our laws more liberal so that more means can be at the disposal of these boards, and in this way permit them to give the people the buildings that the people actually want, but cannot get because the legislature has said they cannot have them. Second, we want laws to protect the health of the child in school while we are educating him for the responsibilities of American citizenship. We want these laws to be so liberal that the very least damage possible will be done to the health of any child while he is in school. We want these laws framed in such a way and with such penalties that they will command the respect and obedience of the school boards and officers that have charge of the school buildings of the state. Without this, failures must continue to be made, the people's money will be wasted, the health of the children will be undermined, and we shall keep sowing the seeds of disease in the rising generation, until shortly we shall be reaping a bounteous harvest of early deaths.

I would suggest that a committee be appointed to correspond with the officers of the various state educational associations for the purpose of agitating the question of securing the necessary state legislation for controlling the construction of school buildings; that this committee be empowered to prepare practical laws, especially along the line of

compelling legislation, and to urge local state associations to secure, if possible, the adoption of these laws.

There is hardly a state, in the western half of the United States at least, but that, with a very small effort, the influence of all of the teachers' organizations in the state, and of the state and local boards of health, could be secured to push and agitate this question. All it needs is someone to take the initiative.

We are dealing today with conditions existing in the twentieth century and must use twentieth-century methods. These are the times of organization; individual effort counts for but little in these days. If we at this meeting make a start to secure the result of intelligent state legislation, we shall have made good progress on the road to success in the near future; we shall see our efforts crowned with success in laws wisely regulating the building of public-school houses.

THE VALUE OF TRUANT SCHOOLS

MRS. JOSEHPINE AHNEFELDT GOSS, MEMBER BOARD OF EDUCATION,
GRAND RAPIDS, MICH.

The chief value of truant schools is their efficiency in bringing under school influence and discipline those delinquent juveniles who, owing to the imperfections of the public schools, cannot be reached by ordinary methods. Every truant is a living illustration of a weakness in our school system. Were the schools perfect, there would be no truancy; but they are conducted and directed by human beings with human frailties, and consequently have deficiencies. It is the duty of school boards to adopt a policy which will remedy such deficiencies as far as possible. They cannot be eradicated, but they can be reduced to a minimum.

Truancy is an evil pertaining especially to city schools; and the larger the city, the greater the truant problem. In the country truancy is an educational problem, but in the city it is a sociological one. In the country the truant simply stands still mentally, while in the city he goes to the bad morally. Truancy is chiefly found in those overcrowded districts of congested population where the manner of living is low and poverty and immorality abound. Truants sometimes come from pleasant home surroundings, but such are exceptions to the general rule. The truant is not a criminal; he generally has entered the highway which leads to destruction, but has not committed crime. To rescue him from temptation is a problem for the truant-school management, and unless it successfully solves the problem, it has no value. Wisely conducted, a truant school is an active ethical force in society.

It is by compulsory legislation that society finds its truants and compels their attendance at school. The systems of dealing with them are

as diversified as the states and territories of the union, while methods are as different as the cities of our country. Thirty states, one territory, and the District of Columbia have laws compelling the attendance of children at schools. The required time for attendance varies from eight weeks to the entire school year. In many cities and towns there are local schools under local management for dealing with truants. Many cities have separate and distinct schools for truants; others send them to ungraded schools, or to special teachers. Good legislation is a great aid for efficient truant schools, but their true value is found not so much in law as in the character of teachers who conduct them. As the glory of the American navy is upheld by "the man behind the gun," so the efficiency of American schools is maintained by the teacher at the desk.

In considering truancy it is necessary to study its causes, which, in a general way, can be divided into five classes: physical and mental defects in the child; bad home influences; poor teaching and bad management in school; the cigarette habit; and a desire to be active and do something in productive life. Most cases can be traced to two or more of the above causes. All of them can be reached by good school management, excepting cases that arise from bad home influences, which can only be neutralized.

It is little realized how many children enter school handicapped by physical defects. Many have defective vision, others defective hearing; many have defects of the spine and breathing capacity; while others have weak muscles, or do not perform all their bodily functions normally. During the past year thousands of school children in the Chicago schools have been examined, and the record is astonishing. In many schools 32 per cent. of the young children did not have normal eyesight, while in one school nearly one-half of the pupils had poor eyesight. In those schools where the pupils come from homes of poverty the physical defects of children were more numerous and marked than among children from good home surroundings. Children with physical defects are expected and required by ignorant teachers to do regular grade work. They are physically incapable of doing it. As a result, when they are old enough to run away from school they do so, and become truants.

More than any other cause bad home influences drive children to truancy. Parents are ignorant, itinerant, intemperate, and indifferent; and their children become truants. Children who do not have enough to eat at home are not brilliant pupils in schools. Children from homes of disorder and distress do not readily submit to school discipline. Some children have vicious parents, and are incited at home to defy school authority and break school laws. Yet more than all others such children need school training, and, if their needs are too much for the grades, they must receive their education by special work.

Occasionally a boy becomes a truant because of poor management on

the part of his teachers. The teacher may be "a nagger," or may take a personal dislike to the boy, which he feels and resents. I have known good teachers to fail utterly in dealing with individual cases. Teachers are subject to human prejudices, and often unconsciously deal unjustly with their pupils. Sometimes a child is driven to truancy by his teacher. I know one case in which the teacher desired to send a child to the truant school because the child was older than the grade, poorly dressed, and obliged to be tardy each session—the age and dress spoiled the appearance of the room, and the tardy marks spoiled the appearance of the register.

The cigarette habit is a pernicious cause of truancy which must be met with keen weapons on the part of the teachers. Fully one-half the truants of Grand Rapids are cigarette fiends who have lost vim and courage on account of the insidious habit. The best prevention in the grades is reading and talking about its evil effects; but literature and lectures upon the subject should emphasize the fact that it wholly unfits boys for games and sports, in which they all naturally like to take part and excel. In some states there are anti-cigarette laws, which are said to be very effectual in eradicating the evil. All connected with schools can do no better missionary work than to urge anti-cigarette legislation and its enforcement.

A few boys become truants because of their ambition to get out in the world and do something. They do not realize the benefits of school discipline in preparing for life. They simply see life and wish to participate in its activities. Were such boys understood and rightly directed, they would not be truants, but good students.

In a large city a truant school cannot be done away with, but, by good administration, its membership can be kept small. For the consideration of school boards the following are suggested as good preventives for truancy: first, a good superintendent; second, good principals; third, good grade teachers; fourth, pleasant schoolrooms and large playgrounds; fifth, something for children to do with their hands.

The superintendent should be, not only a thoro educator, but a man of large human sympathy and philanthropic instincts. He should have an intense love for poor and defective children, and an appreciation of their trials and difficulties. He should not only possess all these attributes, but should be able to impress them upon his teachers and make them feel his sympathy and philanthropy. Such a superintendent saves many a boy from destruction.

Much depends upon the principal in preventing truancy. She should be an experienced teacher capable of doing good teaching, knowing good teaching, and appreciating good teaching. Above all she should know children, their wants, their needs, their trials, and their tribulations. She should have firmness in dealing with parents, tact in dealing with her

teachers, and justice in dealing with the children. She should have sympathy for defective, dull, and evil-disposed boys, and, if necessary, should play the part of a friendly visitor to learn their home influences and lessen their difficulties.

The best preventive for truancy is good teaching in the grades. The grade teacher must put in practice the policy of the board, the theories of the superintendent, and the directions of the principal. She must rarefy and clarify the policies and theories of her superiors before applying them to her pupils, and must be intelligent enough to apply the right theory to the right pupil, or both pupil and theory may suffer. With boys tending to truancy she must have infinite tact and patience, and above all she should lead her pupils to feel that she is their friend and protector; she should have more pride in saving one boy from the streets than in sending a dozen candidates for class honors to the high school. She should be a close observer of children, and quick to perceive their physical and mental defects, so that she can place children of poor hearing on front seats, those of weak vision in good light, and use special expedients for other defects. All pupils are entitled to recognition as persons, and should not be regarded as things for experiment and trial. The personality of a child is as sacred as that of an adult. Our public schools are made for the children and not children for the schools.

Pleasant schoolrooms and ample grounds have a wholesome effect upon boys prone to truancy. This is especially true of schools in the slums. It is inevitable that children from homes of poverty should have a respect and love for beautiful rooms and grounds. The ethical effect of beauty upon childhood cannot be overestimated.

Many boys become truants because the school gives them too many books and too little work. Manual training does much to keep active, energetic boys in school. It occupies both their hands and minds, and, above all, it brings them into touch with that productive and industrial world for which so many of them are yearning. It is reported that in Muskegon, Mich., after manual training was introduced into the schools, truancy practical ceased.

No more delicate problem is presented to a city school board than the management of its truants. All the requirements for superintendent, principals, and grade teachers for the prevention of truancy in the grades must be emphasized and intensified in the teachers of truant schools. None but experienced teachers should be employed—those who in grade work have shown special tact and ability in dealing with the truancy problem. Truant-school teachers must possess firmness, good judgment, tact, *infinite patience*, intense human sympathy, love for children, philanthropic desires, and, above all, an aptitude for meeting people in poverty and misfortune. No one should be employed in a truant school who has not an intense love for the work and a professional pride in its success.

The schoolrooms and playgrounds of a truant school should be made especially attractive. All that can be said relative to pleasant surroundings for school children applies with special force to those who run away from school. The attractions of the street must be overcome by the attractions of the school.

Truant schools should teach many things besides schoolbooks, and have many appliances besides ordinary school apparatus. Every truant school should have a complete gymnasium and an attractive bath-room. A strong, clean boy physically is far advanced toward mental and moral purity. Military training and discipline often accomplish much good in truant schools. Guns and swords are attractive to boys, and the immediate response to command is wholesome.

Games are helpful to truants, especially those whose energy and will-power have been weakened by cigarettes. Creating an interest in games and cultivating the spirit of rivalry and emulation often restores lost ambition, and brings back health and vigor. Plenty of exercise will counteract, and sometimes cure, the cigarette habit. Football, basketball, baseball, and tennis are excellent tonics for weak boyhood. Again, a skillful teacher by taking advantage of the "gang" instinct in truants can successfully organize them, first into teams for play, and then into clubs for reading and study. Frequently a boy will do more for his team, or his school, than he will for himself, and will even put aside his cigarettes to increase the chances of his team winning in a physical contest.

Manual training is an excellent agency for keeping and bringing boys to school. A few months ago manual training was introduced into the truant school of Grand Rapids. The results are flattering. Some of the boys said to me: "We do not need a truant officer on shopdays; we can find ourselves." Our Grand Rapids truant boys at present are having shop-work three times a week. Boys who lack ambition to study books are often anxious to use tools. Manual training is an efficient character builder, and can be used to excellent advantage among boys who lack self-control, to teach them will-power and to eradicate vicious habits.

The general educational value of manual training is great, but even more important in a truant school is its ethical and sociological value. It is difficult to impress abstractions upon weak minds. The child with such a mind cannot comprehend his own inability. He sees no difference between an expression of an idea in his own jargon and its expression in the language of the teacher or a book; but give him something to be made with his hands, and he will at once see the difference between the model and the crude results of his own handiwork. He is slow to see the relations of abstract number and abstract quantity in the schoolroom, but quick to see the relations of concrete number and quantity in the workshop. Attempts at creation stimulate thought and develop accuracy.

The workshop cultivates both hand and mind, and reveals the weakness of each in its products, and reveals them in such a way that the pupil cannot help seeing them, and profiting thereby. He would not have been a truant, if he could have seen its evils, but the workshop puts before his own eyes the evils of waste, false representations, and broken obligations. He there learns to act in sequence and to work honestly. Manual training is a great teacher of moral law.

A truant school is of great value because it saves boys to useful lives who otherwise might become criminals. As an ethical proposition it is worth all it costs to save the boys. Financially it pays, because every dollar expended upon truant schools saves itself many fold in police, court, and prison expenses.

The rapid influx of ignorant immigrants, the poverty and distress in our large cities, and the rapid increase of vice are trying our institutions, and our country is looking to its public schools for salvation. In them all classes meet, and there the evils of society can be assuaged. It is in them that our hopes for the future are centered. The public is realizing the value of truant schools, and year by year greater demands are made for efficient teaching therein. Year by year greater demands will be made upon the grades for preventing truancy. School boards can meet these demands only by employing and keeping good teachers. The best teachers of a city should be assigned to schools where they are most needed rather than where there is the greatest political pull.

Taxpayers are beginning to see the ethical side of our school system, and to realize that ethical considerations pay financially. A city school system can have no better investment than an efficient truant school. It aids the schools and benefits the truants. It pays morally, mentally, and financially.

WHAT CONSTITUTES AN EFFICIENT SUPERINTENDENT?

ISRAEL H. PERES, EX-PRESIDENT OF SCHOOL BOARD, MEMPHIS, TENN.

A school superintendent should be a man of mental and moral integrity, swayed by neither his likes nor his dislikes in the performance of his official duty; a man whose every characteristic breathes a present wholesomeness and not a musty antiquity; whose every decision about matters in his province, if not correct or satisfactory, is, at any rate, considered by the most hostile critic as strictly impartial. The least suspicion of his mental and moral integrity in the discharge of his duty renders him unfit, if not fatally dangerous to the purity of the school system. He must have a broad and liberal culture. He himself must be thoroly educated. He is supposed to be, and ought to be, an educational leader, and this he cannot be unless he be an earnest and assiduous scholar. Without

scholarship and culture he commands neither respect nor confidence, and his administration of his high trust results in no permanent good to the system.

He should be a teacher; should have grown up in the teaching profession. By his character, culture, teaching power, sympathy with and comprehension of pupils; by his will, tact, study, and kindly and confident bearing, he should have won promotion to the high calling of a superintendent. His position should be reached because of his recognized ability as a teacher. He should gain the top by earnest work from the bottom upward, as is done by the great captains in industrial and other professional departments of life.

The superintendent should be superior to the teacher in mental power, culture, and experience; if the reverse is true, there is a mal-administration of forces which works a positive injury to the public-school system and tends toward regress instead of progress. If it should be a recognized fact that the corps of teachers knows more about the art and science of teaching and the needs of schools and pupils than the superintendent, the evil results of such a situation are patent to the most casual observer, and especially to those who interest themselves in public-school matters.

To quote, the superintendent should be "an educational expert who does not waste his time in mechanical detail." His supreme delight should not be in looking after school furniture, buildings, and grounds, but his greatest interest should be in his profession and in the science and art of pedagogics and education. He should be a trained professional expert before he is elected to office, and his experience should not be permitted to be gained by years of experimenting and routine contact with teachers and pupils. In a word, he should be the master of his position in every respect. He should lead; should be capable of increasing the efficiency of his teachers by reason of his knowledge and capacity.

He should be a man who has done something for education, and who is known or is making himself known to the great body of high-class educators in the United States. He should be an authority upon some pressing problem or some educational matter of moment, and should be recognized as such in the educational world; a man who is looked upon in his profession as a student. He should command from his colleagues an enthusiastic admiration for his ability as an educator and manager of a system of schools, and not evoke a smile of good-natured toleration. To this end he should reinforce his study by attending educational association meetings. An idea developed at the National Educational Association meeting in Charleston in 1900, in connection with superintendents, was that they should attend such meetings in order that they might give ideas to others who are there, if they have any to give, or, if they have none, to catch an idea from those who have. This proposition was strongly advocated. The live, up-to-date superintendents of the United States are, to a large degree, the life and brains of educational

organizations, especially of the National Educational Association, which indicates that the modern superintendent who cares to succeed beyond the dollar-and-cent idea must be a man who can mingle among men for the purpose of exchanging views. There is something inspiring in coming in contact with such men, strong and virile, and to hear them discuss in a practical manner the best thoughts on leading educational topics.

It is proper that a superintendent in his monthly or periodical report should present the number of pupils in attendance, the per cent. of attendance and per cent. of tardiness; but it should also contain matters concerning the educational status of the system of which he should be the vital part and which from time to time come up in the administration of his high office. The greatest farce on earth is to hear or read the report of a superintendent which gives the number of pupils in attendance, the per cent. of attendance and per cent. of tardiness, adding not a word about curriculum; the advancement of pupils in character, training, and learning; nothing about methods; not a bit of original advice about the change, adoption, or rejection of text-books; not a suggestion as to the fitness or unfitness of teachers; not a spark of intellectual fire; not a quickening thought; not an inspiring idea; nothing but figures—figures up and down, all in a row. A superintendent who is content with such a report has neither capacity nor ability beyond place and pay, and expects to retain his position, not because of his capacity, but by reason of "pull." Such a superintendent no doubt looks upon a gathering of the National Educational Association as itself a farce, and would not deign to descend from his lofty self-sufficiency to mingle with superintendents who have been eminently successful in their chosen profession, who have worked, studied, learned, taught, observed, and progressed, and who have done something vital for education in the United States.

The *American School Board Journal*, edited by Mr. William George Bruce, some few years ago sent out for discussion the question whether the superintendent should have full power and control in the selection of teachers, text-books, and curriculum, or whether such matters should be left to him, with a revisory and final decision by the board. I was then of the opinion that the answer to this question depended entirely upon the personnel of the board and the personality of the superintendent, and upon the facts surrounding each particular case; that it was impossible to answer the question flatly in the affirmative or negative, because a large number of superintendents did not come up to the full measure of their great calling. But I am a firm believer in one-man power. I believe that the superintendent should be a man of such culture, mental power, and strength of character, educative fitness and managerial capacity, strict impartiality and fairness, that the whole educational part of the school system can be left solely under his control without fear, on the part of the board or community, but that his selection of teachers,

text-books, curriculum, method, and management will be based on merit, and only on merit, and that the schools of which he is the head will, year by year, substantially and permanently progress. This is not an ideal picture. It is a situation which can be attained, if the taxpayers who work hard for their daily living, and to pay their taxes to support schools, will demand for the position of superintendent a man who is trained absolutely in his profession along the lines hereinbefore indicated; and, for this reason, his election should depend on his fitness and the faithful performance of his duty, and not upon the past records in war or politics. These two considerations should especially be divorced from the election of the superintendent, no matter how much of politics there may be in the election of the school board, or any other municipal agency having the care of the schools.

I take the liberty to incorporate in this paper the editorial comment of the *Charleston News and Courier* of July 13, 1900:

One man, for example, is made superintendent because he performed good service for his country in the war that closed thirty-five years ago. It may be that he could not write an English sentence to save his life; that he doesn't understand the multiplication table; that he has no acquaintance whatever with the history of our institutions; that he is without the least executive ability; and yet he fills the most important office in the country, because he must have a place, and there is no other office to which he can be assigned in the distribution of the loaves and fishes.

Such men should be left out of the schools, and all such considerations as the foregoing should be divorced from the election when it comes to filling the superintendency, either of the county or of the city schools.

A superintendent should be a student of political and social science. He should understand a philosophy of the development of individuals, nations, and races. He should understand the possibilities of his own section. (Mendenhall of the National Normal.) If he does, he can make his schools keep pace with the social progress from the primitive community to the highly complex social organism of which we are today a part.

To summarize: The superintendent is the life-blood of the school system. He is the main-spring; he is the fountain. From him come energy, ambition, progress, life, and success; or from him emanate a dull conservatism and provincialism, content simply to be pushed along by the general growth, development, and environment. The superintendent most of all should be a man of liberal and broad education, a man of mental strength and power, a man of the present and not of the past. He should be a man who is willing to and does take an interest in educational matters, who is making a study of the science of teaching and education; and no man should be elected a superintendent of any system of schools anywhere in the United States who is not competent from every point of view suggested, for it is he, as much as, if not more than, anyone in the land, who controls the destinies of the coming generations, and "his brains and morals should be the best attainable."

LIBRARY DEPARTMENT

SECRETARY'S MINUTES

FIRST SESSION.—THURSDAY, JULY 11, 1901

The first session of the department was held on Thursday afternoon in the Central Methodist Church at 3 o'clock.

Music—"The Violet," *Mildenberg*—by Miss Edyth Lott.

After a few preliminary announcements, President R. C. Metcalf, of Boston, delivered his address on the subject, "The Library Movement—What it Means and What it Includes."

Dr. James H. Canfield, librarian of Columbia University, New York city, spoke on "The Public Library and the Public School."

The subject was discussed by Mr. F. M. Crunden, of St. Louis; Mr. Buck, of St. Louis High School; President Metcalf, of Boston; and Miss M. E. Ahern, of Chicago, Ill.

The next paper was presented by Mr. G. F. Boyd, superintendent of Schools, Kosciusko, Miss. This was followed by a paper on "What the Normal Schools Can Do for Teachers on the Library Side," by Miss Irene Warren, librarian of School of Education, University of Chicago, Chicago, Ill.

W. I. Fletcher, librarian of Amherst College, Amherst, Mass., next addressed the department, bringing a greeting to the association from the American Library Association, and speaking on what he termed "The Essential A B C of Reference Work."

A Committee on Nominations was appointed by the president as follows:

O. H. Bakeless, of Pennsylvania.

G. F. Boyd, of Mississippi.

M. E. Ahern, of Illinois.

The department then adjourned.

SECOND SESSION.—FRIDAY, JULY 12

The meeting was called to order at 3 P. M. by President Metcalf.

The first paper was presented by Miss Isabel Lawrence, training teacher, State Normal School, St. Cloud, Minn., on "How Shall Children be Led to Love Good Books?"

A general discussion followed the reading of Miss Lawrence's paper.

"The Place of the Library in Education" was next presented by Mr. Melvil Dewey, director of the New York State Library, Albany, N. Y.

This was followed by a paper on "The Library and the School as Co-ordinate Forces in Education," by Mr. Livingstone McCartney, superintendent of public schools, Hopkinsville, Ky.

The Committee on Nominations reported the following names:

For *President*—James H. Canfield, Columbia University, New York city.

For *Vice-President*—Reuben Post Halleck, president of Boys' School, Louisville, Ky.

For *Secretary*—M. E. Ahern, editor of *Public Libraries*, Chicago, Ill.

Mr. Henry Utley, librarian of Detroit, extended an invitation to the department on behalf of Mr. James E. Scripps to visit his library and art collection. The invitation was accepted.

The meeting then adjourned.

MARY EILEEN AHERN, *Secretary*.

PAPERS AND DISCUSSIONS

PRESIDENT'S ADDRESS—THE LIBRARY MOVEMENT— WHAT IT MEANS AND WHAT IT SHOULD INCLUDE

R. C. METCALF, SUPERVISOR OF SCHOOLS, BOSTON, MASS.

In a great country like ours, made up of many free and independent states, it would be difficult to tell just what is meant by the library movement, or by any other movement which is carried on by local authority and influenced by local conditions. In fact, the term has a different meaning in different localities, corresponding to the differing demands of the people. Perhaps we may say that the general demand for library privileges which has come, is coming, and will continue to come from all classes of our people and from all grades of our schools, plus the response which has come from the libraries themselves, has caused, and may be called, the "library movement." Those of us who have seen fifty years or more can easily trace this movement from small beginnings to the present remarkable proportions. We can well remember the little library of fifty books, or less, kept in some favored house in a convenient neighborhood, free to all who cared to borrow, to care for, and to read the somewhat dreary volumes which fairly represented the literary taste of the so-called better families in the town. I can well remember just such a collection of books, some three miles from my home, kept in the best room of one of the best families, and can also remember the awe with which I approached the sacred precinct, took down one of the precious volumes, and received permission to carry it home.

I can remember when the little public-school libraries first found place in the country school buildings. So far as I know, these were the only libraries in the town, private libraries being then unknown in the homes of the farmers. Few people cared to avail themselves of these books, and no effort was made to interest the children in reading. The change in my own state of Massachusetts in this respect has been wonderful, and is worthy a moment's notice. I select a few passages from a report made in 1899, entitled *The Public Libraries of Massachusetts*:

In 1839 the Hon. Horace Mann, then secretary of the board of education, stated, as the result of careful effort to obtain authentic information relative to the libraries of the state, that there were from ten to fifteen town libraries, containing in the aggregate from 3,000 to 4,000 volumes, to which all the citizens of the town had the right of access; that the number of volumes in the public libraries of all kinds in the state was about 300,000; and that only about one-seventh of the population of the state had any right of access to them.

From the eleventh report of the library commission, published in

1901, we learn that at the present time there are but two towns in the state without public libraries, and only a very small fraction of 1 per cent. of the state's population without library privileges. Time will not permit today a more extended statement concerning the library movement that has been going on for nearly a hundred years in that state. The large number of free public libraries that have been established by means of gifts from public-spirited men and women; the generous support of these libraries by the people, who annually vote large sums for that purpose; the provision made for opening the libraries to the children in the public schools; and the special arrangements made in many towns and cities by which teachers are enabled to draw from the libraries large numbers of books at one time for use in their classes—these facts speak loudly in praise of the old Bay State, and constitute a record of which she may well be proud.

The change in public sentiment toward libraries has not been confined to one state or to one section of our country; it has spread throughout the union, and is now one of the great educational forces of the land. The common people now look upon the library as a necessity—as a grand, free public school, which brings education to the very doors of even the poorest. There is a general demand for the privileges which the library brings, a demand which has met with a most generous and enthusiastic response from the men and women who control the library forces. This is the “library movement,” and it means a general diffusion of knowledge among all classes of the people; it means the cultivation of a more refined taste, and a general uplifting of moral tone whenever and wherever the best literature is read.

THE SPIRIT WHICH INSPIRES THE LIBRARIES OF THE COUNTRY

Twenty-five years ago I was invited to give an address before the American Library Association, which at that time met in Boston. The address was never written, but, as nearly as I can recollect, the question assigned was: “How Can the Library Best Serve the Schools?” The fact that such a body of men should have invited a schoolmaster to help them formulate a plan by which the public library could serve the schools shows the spirit which even then inspired the work of the librarians of the country. This has always been the spirit of the representatives of our public libraries, and any seeming failures to accomplish all that in reason could be expected must be ascribed to other causes than a lack of inclination on the library side. In fact, I may say here that the greatest obstacle in the way of leading children to read and to enjoy the reading of good books has been those teachers who themselves have little if any real love for good books. The only classes of pupils that I have found in my long experience to be enthusiastic lovers of the best books have been classes in charge of highly cultivated men and women of unquestionable

literary taste. The libraries have been ready to help ; too many of the schools have not been ready to be helped. All honor to those, whether teachers or librarians, who have given a helping hand in so training children that they will love the purest and best in our literature !

My experience teaches me that the library movement, to be successful, must be directed toward the teachers themselves. The normal schools and colleges, where so many of our teachers are now trained, have a work to do here that cannot be overestimated. I commend this feature of the work to the attention of all those who are connected with public libraries.

NEED OF INFORMATION CONCERNING THE LIBRARY FACILITIES OF THE COUNTRY

Assuming that a great public library is a great public blessing, we, as representatives of the whole country, ought to be familiar with the library facilities of the whole country, to the end (1) that the influence of this department may be felt in aid of the establishment of libraries where none are now to be found, and (2) that the character of those now established, but sustaining a precarious and unprofitable existence, may be improved. How can we do this work more effectually than by appointing some one of our number to collect, during the coming year, such facts as may be had concerning the public libraries of the country, the number of libraries in the several states, their distribution among the people, the phases of work undertaken, and such practical results as may be properly vouched for ? Such a report, reduced to reasonable proportions, omitting details, and making brief suggestions of good already accomplished, if widely circulated thruout the country, might be the means of giving a wonderful impetus to this branch of public education.

In Charleston, S. C., one year ago, we listened to an excellent paper upon "The Traveling Library," by Mrs. Heard, of Georgia, who showed us how a few energetic, public-spirited men and women can, at little expense, add much to the intellectual and moral progress of a community. The free traveling library, however, does not belong to Georgia alone ; other states have for some years been using similar means to accomplish similar ends. It has taken strong hold upon the people of several states, and it is thought to be an important factor in the education of all classes in the community.

This is only one phase of the library movement, differing somewhat from the ordinary, which might well find a place in the report just mentioned.

The best public library is that which most successfully leads its patrons to want only the best books, and from its own treasures satisfies these wants most completely. The library is a public educator. The library and the school are co-ordinate institutions ; neither is complete in itself, but each is necessary to the success of the other. What more

important work can we do in the Library Department of the National Educational Association than to show in the clearest manner possible the interrelation of the forces of the two great educational institutions, the library and the school? Today they stand face to face in the land, each somewhat jealous of the other's claims, each timidly asking the other's help, but each somewhat fearful of the other's encroachment upon native rights and privileges. These fears must be removed; these jealousies must give way to confidence and respect; these two great educational forces must unite in a common warfare upon ignorance. To this work also your attention is invited.

NEED OF A TRAINED ASSISTANT IN EVERY LARGE PUBLIC LIBRARY AND
PUBLIC SCHOOL

A good public library stands for what is highest and best in a community. An ideal librarian knows and loves books, and he will make any needed sacrifice to assist both young and old in selecting such courses in reading as are most likely to interest, instruct, and healthfully stimulate the reader. But the duties of a librarian are usually so exacting that he has little time to give to the instruction or the entertainment of his patrons. Why may not every large library employ at least one person of prime scholarship, and of excellent judgment and tact, whose sole business it shall be to teach the people what and how to read? This result may be reached by the free distribution of suggestive leaflets, by familiar talks, and by practical illustrations in the library itself which will show how to find, in the books before the readers, some timely information respecting matters of common interest. Why may not the people, whose industry and thrift make a library possible, be led to feel that their highest interests and the highest interests of their children may be lovingly conserved by one whose education, whose social standing, and whose devotion to literature make him a fit counselor of young and old?

Most of our large graded schools, at least in many of the states, have small but carefully selected libraries. These books, if well chosen, supplement the work of the class-room, or they furnish the beginnings of literature for the lower grades, and real literature for the pupils in the grades above. In the grammar schools, history, geography, and nature study lead the pupil at once beyond the limits of an ordinary text-book, and collateral works upon the subject of study are needed to supplement the only books furnished to the pupils.

The ordinary reading books serve an excellent purpose by furnishing material for training pupils in the art of reading; but such material is too scrappy to lay a satisfactory foundation for reading good literature. The child must be led by orderly steps (1) to become a lover of good reading, and (2) to become a somewhat reflective and appreciative reader of the best books in our libraries. Such training will be successful only when the teacher himself is a lover of good books; a person whose whole

nature responds to the author's thought, and whose intellectual training makes him appreciative of the beauty of the author's language in which his thought is clothed. With such a teacher the child soon acquires a love for the best literature, and he may be left to follow his own will in the choice of books. But many of our teachers have not had the training that would make them safe guides for children, and it is often better to designate one from the many teachers in a school to take charge of this work. May we not hope that our school authorities will soon recognize the need of expert training of children in the use of books, and will appoint at least one teacher in every graded school who has special fitness for such work?

NEED OF NORMAL-SCHOOL TRAINING IN LIBRARY METHODS

May we not also hope that all our normal schools will give careful instruction in library methods to be followed in the reading and in the study of books, to the end that all pupils of whatever grade may become intelligent patrons of the public library? We expect to present to this department during the present session of the association sufficient evidence to show that instruction in library methods is now given in some of our normal schools, and some evidence to show that such instruction is having a salutary influence upon the public schools. If we can clearly demonstrate the need of what, in this paper, we have termed library methods in using books, there is no doubt that the normal schools of the country will heartily respond to our demands. But such demonstration must not only be clear, it must also reach the people who make public libraries possible. I most respectfully invite your attention to this important matter.

THE PUBLIC SCHOOLS SHOULD GIVE SUCH TRAINING TO CHILDREN AS WILL MAKE THEM LOVERS OF GOOD BOOKS

While calling upon the libraries for all the help which they are able to give both to the school and to the community, I would not forget the duty which the school owes to the library. Building up large public libraries, filling the shelves with the best and most costly books, employing skillful librarians and assistants to administer the affairs of the institution when completed—all these will fail to make the free public library a great public blessing, unless the schools do their share in preparing children for a wise use of the treasures which the libraries now so freely offer. What boots it to spend time and money upon expensive books and rare pictures, if one-half the patrons of the library want only cheap, sensational literature, have no taste for a work of art, and no use for map, chart, or curious manuscript?

Schools should be furnished generously with good books by the school authorities, and these books should be carefully read by the pupils under the direction of some accomplished instructor. A large saving of

time is made when chapters, and even whole books, are read in class, freely commented upon by teacher and pupils, and beautiful passages pointed out, carefully studied, and committed to memory. Much of the reading, however, may be done by the pupils at home, leaving the "reading hours" in school for informal discussion, and for asking and answering questions by teacher and pupils. Children thus come to love good books, and to appreciate an author's art in the construction of his story. What better work can a teacher do for his pupils than to lead them on step by step, in their daily reading, until they become lovers of good reading, and then step by step, still forward, until a taste for what is best in literature is surely gained, and becomes the guiding star in all future reading? To this plan of work with books the attention of teachers is most earnestly directed.

Finally, we should heed the criticism which comes to us from high places that we read too much and think too little. Dryden, in his caustic criticism of men and measures in the time of Charles II., says :

But far more numerous was the herd of such
Who think too little and who talk too much.

Much good will come to the reading public when the best thinkers among our literary men and women work out and publicly declare the principles which should guide us in the reading of books.

In this paper I have defined, at least in part, the so-called library movement. It is a movement which will be completely successful only when all the forces that have given rise to it work together in harmony. Not only are the library and the school co-ordinate educational institutions, working together for the general welfare, but the people themselves are a mighty force, now fairly aroused, and demanding a share in that training which makes for greater material prosperity, for a higher intellectual growth, and for purer standards in morals and religion.

I would again call your attention (1) to the need of information concerning the libraries of the country, and to the work which they are trying to do ; (2) to the need of trained assistants in large public libraries and in large public schools, to give help to children and to adults in the selection of books, and in marking out courses of reading ; (3) to the need of training in library methods in the normal schools of the country ; (4) to the need of judicious training of pupils, in public schools, in the reading of books, in order that our children at an early period of their lives may become lovers of good literature ; and (5) to the criticism, now going the rounds of the public press, that we read too much and think too little.

I invoke your best thought to the solution of such problems as are connected with the library movement, and to a consideration of such phases of educational work as will make that movement a blessing to the people of this country.

PUBLIC LIBRARIES AND THE PUBLIC SCHOOLS

JAMES H. CANFIELD, LIBRARIAN OF COLUMBIA UNIVERSITY, NEW YORK CITY

[STENOGRAPHIC REPORT]

It is well for those engaged in any undertaking to stop occasionally and take stock, to render an account, to make such observations as will enable them to determine exactly where they are and why they are there. We who are present this afternoon are connected with public libraries, and we are to discuss their relations to and with the public schools. It will be proper and wise to determine just why this system of education exists.

Undoubtedly the fundamental reasons for maintaining public schools, at public expense, briefly stated, are these :

The keynote of American life, political and social, is individual responsibility. In this country we do not recognize any class distinctions, in the sense that one class has the right to control and direct other classes, or is directly responsible for the well-being of other classes. The individual citizen is the corner stone of the American political system ; and he is individually responsible for the correct and efficient discharge of his duties as a citizen. Every man in the United States is born a policeman ; and as soon as he reaches his majority—even before that—he is responsible for the preservation of law and order. He is responsible also for intelligent planning and effective working in behalf of the common weal. This individual responsibility necessarily demands individual intelligence—intelligence as complete in its mastery of all public and private affairs as the state can possibly make it.

The state maintains a public-school system from absolute necessity rather than thru choice. Of all the elements working political, social, economic, and individual disaster, decay, and final and complete ruin, the most swift and terribly effective is that tool of the partisan and the demagog in all nations and in all ages—an ignorant and turbulent populace. The state must insure itself against such a condition. Just as it protects its archives against fire, its courts against intimidation, its officers against interference in the discharge of their official duties, and its citizens generally against loss of life or property, and against restrictions in their choice of right of way, so it must protect itself and all its interests, its citizens and all their interests, against the blighting and devastating effects of ignorance. The state does not give free public education as an act of generosity—as direct and special advantages to certain individuals for their own benefit. The state maintains the public-school system as an act of self-protection ; an act grounded in the highest and most effective selfishness.

The structure of government in this country—local, state, and

national — constantly gives force to public opinion. The ordinances of a municipality, the statutes of a state, the acts of Congress, are little more than expressions of public opinion. Possibly it would be better for all of us if those acts and ordinances expressed public opinion even more clearly and completely than they do. The entire civil life and policy of the country is a reflection of public opinion. This being true, it necessarily follows that public opinion must be enlightened, if we are to get on with any safety, with any celerity, with any surety. Certainly we all desire advancement, and that our advancement shall be marked by these three characteristics. It is impossible, however, even to hope for this, unless public opinion is enlightened.

The American people are their own masters—in all respects and in every detail of their daily lives. We know of no kings in this country except the American sovereign, who puts a man under his hat every time he leaves his own house, and who rarely uncovers unless he addresses himself. We do not attach very much importance to the fact that certain well-known American names may appear in some human herd-book, or on the rolls of state or national officials. Pedigree counts with us when it gives a man a brain of finer fiber and eyes that are clearer and hands that are cleaner and feet that are swifter in the service of his fellow-men. Beyond this it counts for little. It is doubtful whether there was ever a time in the history of the world, or a country in the history of the world, within which the individual citizen was left so entirely to his own resources as in this country and today. And we are our own masters for good or for ill, and must have this absolute freedom of choice—even to the point of doing harm to ourselves—or there is no real freedom of choice whatever. That this self-mastery may be a mastery for good and not for ill, comes an imperative demand for public intelligence as widespread as the public schools can possibly accomplish.

The public school is today the most purely democratic institution in the land. Its doors stand wide open to the children of all classes of citizens: from the children of the great uncommon common people to those of parents who claim a much higher rank. Within the schoolroom there is but one ground of distinction, and that is merit; and this distinction is possible to all. It is a free-for-all race, in which only the best win recognition and renown. Certainly there can be no better means for preserving republican equality, in a country in which republican equality is the cardinal characteristic of citizen life.

The state has no resources at all comparable with its citizens. Richness of soil, vast extent of forest, commerce and trade and manufactures—all these are but the means which minister to the well-being of the industrious and intelligent citizenry. The state believes that great men are better than great cities, and that wisdom and experience put in the service of the state are better than silver and gold. Because the tendency,

at least, of the work of the public schools is to create these higher conditions to develop its citizens, the state favors the public-school system. It sees in that system great constructive power, which may not wisely nor safely be ignored.

The conditions of a free and stable government are only to be found in a social life that is free and harmonious. We sometimes forget that society precedes the state, that the state is based upon society, and that civil life finds the excuse for its existence in the service which it renders social life. When social life is marked and marred by narrowness and ignorance and petty divisions and ignoble strife, it is impossible that the government shall long remain either stable or free. General intelligence and general wisdom, not with the few, but among the mass of the people, lie at the very threshold of all effective social harmony.

Intelligence is the basis, and the only sound basis, of all industry. Some men are constantly assenting to the contrary and are talking about pupils being educated beyond labor, of the schools which breed a distaste for labor. But the undeniable fact is that an ignorant community is rarely an industrious community; while, on the contrary, industry and effective industry was never as widespread and as universal as it is today, with a schoolhouse with wide-open door standing within easy reach of every home in seventy-five millions of people. An ignorant people stumbling upon the conditions of life in America today could not possibly meet those conditions nor improve those opportunities. Only a highly intelligent people can and will be effectively industrious.

Last — because of the necessary limits upon the length of this paper, and not because the subject is exhausted — public education is a continual and effective force in uniting society. In countries where education is left to private enterprise and can be secured only by private expenditure, education is that which withdraws a man from his fellows, which separates him from the mass of men, which takes him out of the world as one who would live apart — a force which divides society. Wherever education is a function of the state, as it is in all democratic countries, there is a continual tendency to bring the results of training to the service of all; to make culture a thing for the forum and the marketplace, rather than for the cloister; to throw off cap and gown and stand in apron and shirt sleeves ready for work. There is no force today in this country working so powerfully for the unity of all people as the public schools.

The maintenance of a public library at public expense can be justified upon precisely the same grounds as those which have been presented for the maintenance of the public schools, and hardly upon any other ground. Certainly these are sufficient grounds, and afford an entirely competent and satisfactory answer to those who may ask us for the reason for our faith.

The American system of free public education, therefore, consists of the public schools and the public libraries. The entire wisdom of this statement is seen when we remember that the average American child receives but five years' schooling. This is the narrow portal thru which men and women must enter upon life, public and private, in this country. It is absolutely essential, therefore, that the public libraries supplement the work of the public schools — along precisely the lines indicated above.

This being true, there is pressing need that the officers and workers in both these sections come into helpful and efficient understanding of this common system, and see what can be accomplished by hearty and intelligent co-operation therein. The directors of public schools and the directors of public libraries should be in close touch with each other. It would be exceedingly helpful if in appointments and elections this matter were kept so closely in mind as to insure at least one or two directors common to both the schools and the libraries. It would then be possible to report in the meeting of one board the purposes and plans of the other. The board of directors of every public library should have a subcommittee on the relations of the library to public-school work, and every school board should have a subcommittee on public libraries, charged with the duty of frequent conferences and co-operation with the library authorities.

The teachers in the public schools, and the officers and other workers in public libraries, should confer frequently concerning their common work.

Those in charge of public libraries ought to make large and generous provision for (1) the teachers as expert workmen on special lines. The school authorities will, of course, supply standard reference-books such as are needed daily by both teacher and pupil; but the public library should undertake to supply the teacher with many books which she cannot be expected to purchase for herself. Some of these will be selected on the request of the teacher, some on request of the school board, many because of the interest and intelligence and expertness of the librarian. (2) For the immediate work of the child. There is much — not too much — collateral reading that can be carried by the children of the schools with profit and without overstraining. The administration of a public library will keep in close and constant touch with the work and grades and classes of the public schools, and will see that books which are tempting and helpful are within easy reach of the children. (3) Provision will be made for the work of the child after leaving school — projected along much the same lines as those set forth in the curriculum itself. As an illustration: it ought not to be difficult to maintain the interest and direct the reading of a child who has left the public schools just as he begins to take an interest in the history of his own country or in that of other lands, or has secured a smattering of the three fundamental sciences, or

has learned to read with pleasure a few masterpieces. If there has been practical and efficient co-operation between the teacher and the library up to the time of the withdrawal of the child from the school, such pupil will turn readily and eagerly to the library as furnishing incentive and opportunity to continue this work.

School authorities and teachers should give especial attention to the library work of children, and should endeavor to interest them in the public library as an institution which can minister very effectively to their later growth and enjoyment. This may be accomplished in several ways:

1. Reference libraries should be established by the school authorities in the school buildings, and pupils should be taught how to use these readily and efficiently.

2. For supplemental or other reading the child should always be directed to the public library. It is a mistake to create special or branch libraries within the school buildings. These are only convenient while the pupil is attending school, and they tend constantly to withdraw the pupil from what we know as "the library atmosphere." It was Lowell who said the foundation of his literary life was laid in his father's library—"the smell of the leather," as he called it. It is of great value to a child to be daily impressed by the size of the library, even tho at first this leaves him with confused ideas; to feel the magnitude of literature and the vastness of its extent, by the number of books which he sees on every hand. The branch library gives the pupil little, if any, acquaintance with the public library as such, and leaves him practically a stranger in the place where he ought to feel most entirely at home.

Every public school ought to have in a prominent place a bulletin board, giving the location and the name of the nearest public library, its hours, and a brief statement of its privileges, and the way to secure these, and the name of the librarian. Beneath this there should be room for notices from the library, special lists of books, and other information which will be tempting and helpful to both teacher and pupil.

3. Teachers should urge those children who must drop out of school to continue reading on different lines, the teacher herself continuing personal and helpful relations as long as possible. I have heard of one teacher who maintained these relations with quite a number of more than willing pupils for more than ten years after the pupils had necessarily withdrawn from the school, in each case finding ample reward in the larger and happier and more intelligent life, and in the warm affection which sprang from a recognition of this unusual thoughtfulness and consideration.

Much that has been suggested is not new to either teachers or librarians. Yet it is unquestionably true that of thoughtful, intelligent, and effective co-operation we have had all too little thus far. In a certain sense the public libraries are of even more recent growth than the public

schools. Of the possibilities of each, and especially of the two combined, we have as yet but slight realization. Yet we are all beginning to understand that they constitute the two most potent factors in the future of this country. Of this we are assured—given, a generation of children who understand the place and value of the public library, and there will be no question as to intelligent and effective citizenship.

DISCUSSION

F. M. CRUNDEN, St. Louis, Mo.—While it will not be possible for some time to come to have branch libraries as numerous as is desirable thru the different parts of a large city, they are the final solution of public-library work for the great mass of the people. It is not possible to render the best service with all the books housed in one central building, nor do I think that a branch library in a schoolhouse solves the problem. This makes the library savor too much of the school library, and its benefits will not be sought by the people who have finished, what we are accustomed to call, school life. Children should be early taught to look on the public library as not only a source of helpfulness open to them in their school days, but also an advantage of which they may avail themselves in after-life. This they will do, if the library be placed in the school buildings.

MR. BUCK, St. Louis, Mo.—It seems to me that the reading of the school children, particularly in the upper grades, should receive more careful oversight than is now given. I make it a rule to choose books of different classes of authors, and put them in the hands of my students to teach them to read, and to read intelligently. We meet once a week to review the contents of the book under discussion, and try to make an interesting exercise that will be helpful, without giving marks for the work. The second-year class in English literature should read Thackeray, Scott, Kingsley, and Dickens intelligently and enjoyably. This they will do, if they have been started properly in the first place, and the love of good literature installed.

WHAT THE NORMAL SCHOOLS CAN DO FOR TEACHERS ON THE LIBRARY SIDE

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UNIVERSITY OF CHICAGO

One who studies the history of schools and libraries will find much that is analogous. Educators call this the age of the child, in contrast with the early efforts to reach only the mature student. The youngest generation of librarians can plainly recall glaring signs posted on more than one library door: "Children unaccompanied by parents not allowed in this building."

Our fathers tell us of the days when a town of considerable size was considered quite fortunate to have one school building, while today a town of the same size believes five or six schools, at least, a necessity. The public libraries, only a half-century old, are beginning to feel a similar

need of expanding, and are establishing delivery stations and branch reading-rooms in various parts of our cities.

The public library, like the public school, has come to believe that the hope of the future lies in the education of the child. The modern progressive public library has dedicated a room to the children. Nor is it a room in some dark basement corner, but a large, bright room, with plenty of light and air, attractive pictures on the walls, low bookshelves filled with carefully selected and beautifully illustrated books, and an attendant specially trained for work with the children. This year the American Library Association held the first meeting of a section formed for the purpose of studying the child's needs.

A careful examination of the many papers and discussions on the co-operation between libraries and schools, from both teachers and librarians, would lead to the conclusion that the majority in both professions believe that a closer relationship is to be desired.

Those who have thoughtfully considered the experiments of the teachers and librarians in furnishing literature to the children have drawn one general inference: that the teachers seem to be much better acquainted with the children and the librarians with the books. Each, feeling the need, has set to work, often without the aid of the other, and the result is that we find work attempted by the teachers which could be done much more economically by the librarians, and *vice versa*. Has not sufficient interest been aroused and preliminary experimental work been done to enable us now to consider some systematic division of labor?

There are two institutions around which community life naturally groups itself: the public school and the public library. A very large per cent. of the children leave school before the age of twelve. It is, therefore, of the greatest importance that they should know where to obtain reading and guidance after their school period is ended.

No one outside of the home ever enters as intimately into the life of the child as does the teacher. The child is compelled to go to school a certain number of hours a day for a given number of years. He goes to the library when he chooses. Therefore we look to the teacher to inspire in him a taste for good reading, and to train him in an economical use of books. It is the librarian's duty and privilege to prepare the material for the teacher's use, and to be ready to take up the work with the child when he leaves the school for the day, the vacation, or for all time. If the preceding propositions be accepted, it is obvious that the teacher should receive training in the use of books and libraries. Two years ago this section, in a pamphlet sent broadcast to librarians and educators, recommended that every normal school and school having to do with the training of teachers offer such a course.

It seems logical to suppose that the best appreciation of such work, from both the teacher's and the librarian's standpoint, is to be found in

the normal-school librarian. His position gives him the opportunity of working with those from kindergarten age to the experienced teachers, who are all bent on one thing—finding the best for the child. His faculty is composed of specialists, who can give judgment as to the character of the books; the critic teacher, who can advise as to their adaptation; and the child himself, who, with proper guidance, becomes the best of all critics and judges. It is to the normal school, then, that we may expectantly turn for the most thoughtfully selected and carefully tested lists of books for children.

Several normal-school librarians are now giving courses to the pedagogic classes with the aim of presenting enough of the principles of library economy to enable the students to organize and administer the average school library, use books and libraries more economically, and more intelligently advise the children as to their reading. The following is a brief outline of a twelve-weeks' course which was given by the librarian to the pedagogic class at the Chicago Institute last year. It could have been carried thru a second quarter with much better results.

1. The construction of the book, followed by practical work in the making of books, thruout the course.
2. Organization of a library. Preparation of the books for the shelves. Cataloging. Classification.
3. Use of reference-books. Dictionaries. Cyclopædias. Handbooks. Indexes. Bibliographies.
4. Present relation of libraries to schools.
5. Children's literature.

Many teachers do not know where and how to obtain books for their own and their pupils' use. When we come to sum them up, there is a surprisingly large number of institutions that are attempting to supply literature, which, if not helpful to the teacher in the schoolroom, certainly would be in the community from which his pupils are drawn. But it is only by chance the teachers find these. The normal-school curriculum should offer a course so that its students would know the present organizations to which they can look for help. They should know that many states have provided laws regulating the establishment and maintenance of public libraries and public-school libraries. A discussion and comparison of these will bring out their virtues and likewise their weaknesses. The normal-school graduate who may work in the country districts should know that the state library commissions in those states fortunate enough to have such have undertaken to send carefully selected collections of books to the rural districts, and an application for a library from the teacher of the district will obtain one at practically no expense to the community. In some states the women's clubs are undertaking a similar work. The New York State Library loans to the schools, in addition to books, large and beautiful pictures.

The normal-school student who is assigned to the slum district of any city should know that the Carnegie Public Library of Pittsburg sends neat little cases containing about twenty books to the home of a child in the poor quarter of the city. The child is made the librarian of the collection, and he and ten of his friends form a home-library club. A volunteer visitor meets the children once a week, reads to them, tells them stories, and teaches them wholesome games. Each child is allowed to take one book home every week. In other cities this home-library work has been carried on by the library clubs, the Associated Bureau of Charities, the Children's Aid Society, and various other similar organizations. For many years to come there will be a legitimate place in the educational scheme of every large city for the home-library work. The furnishing of the books and their care can be done with the least expense of labor and money by the public library. The teachers can much more effectively name the homes in which they should be placed. This movement is at present a puzzling problem, since it is as yet hard to convince many library or school boards that money put into home libraries will reduce the number of truant officers and lessen the number of boys sent to the reform schools.

Every normal-school student should know that our government is one of the largest publishers in the country. Its authors are men who are authorities in their subjects. A list of its publications is issued every month. Many of these would be the most valuable reference-books for the school, and are furnished at the cost of printing and in some cases free. The states are likewise publishers of books on local subjects. Some cities have published the results of interesting civic undertakings. Such sources of information should be known to all teachers.

Every school in our country has a library, or is planning to have one. In most cases heretofore the school library has been formed with no thought of making it co-operate with the public library of the town, and an unfortunate duplication of material, efforts, and aims is the result. The normal-school student should be led to see that one of the first considerations in establishing a public library or a school library in any town is the possible correlation of the two for the good of the whole community.

There are certain reference-books which are in continual demand in the schoolroom. Such books and those used in sets for supplementary reading are a necessary part of the school equipment, and as such should be owned by the schools. On the other hand, if the student carefully examines as many school libraries as he can, and accounts of others, as they are administered at present, he will perhaps be led to the conclusion that the public library can more economically furnish the general collection of books, keep them in better condition, and make them more accessible to a larger number of people, with less expense of time, energy,

and material, than can the school. From his study of school management and experience in the model school he will agree that the average teacher is already overburdened with her duties. The librarian has reduced the care and use of books to a science, which the world has been pleased to recognize as library science. In order to keep his library up to date the librarian must carefully study the lists of new books published every week, and be a constant reader of books and book reviews. He is therefore able to select the latest and, with the help of experts and bibliographies, the best books on any given subject.

If our normal-school students talk with experienced teachers, they will find there is hardly one but feels the need of a larger and a more carefully selected collection of books than her school library is now able to furnish, in order to carry on her work successfully. They will find that many libraries are attempting to meet this problem. In Milwaukee they send a box of books from the public library to every room in every school. The books are selected by either the teacher or the librarian. In Buffalo they do the same, and have employed two attendants whose duty it is to look after the interests of the schools. At the Cleveland Public Library and the Pratt Institute Free Library they have fitted up rooms as attractively as possible for the sole use of the children. Some libraries have invited the teachers to come to the libraries and bring their classes for consultation of books. At the Carnegie Free Library in Pittsburgh the children's librarian has inaugurated a story hour, when she tells the children stories. She has also made beautiful large poster bulletins, which are hung in conspicuous places, indicating good books on various subjects. All over the country we find similar plans, but all with the one aim — to raise the standard of the children's reading.

A class discussion of the relationship between libraries and schools usually brings out the impossibility of using the library as much as is desired, because of the great distance between the library and the school buildings. An appreciation of this on the part of the teachers of the country might lead to a public realization of the economy in material and administration, were these two institutions housed near each other.

The students are usually quick to see that there are certain principles in the schemes of classification and cataloging now used in libraries that they could have used advantageously thruout their entire course. They are at once interested in finding a way to help the child so to classify, arrange, and index material and references collected that they can be used with little waste of time and energy. A well-known sociologist and writer recently said that such a training as has been outlined in this paper would have been invaluable to him; that he had destroyed material and often hunted days for articles which were practically lost in the great quantity of unclassified material he had collected. The card-catalog system has not stopped at the public and private libraries, but is rapidly

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invading the banks, railroad and insurance offices, and various other commercial houses.

But perhaps most important of all is it that the normal school should train the teacher to use the book itself, and teach methods of training the children to use books economically while they are still young. This may be begun by distributing one copy of the same book to each member of the pedagogic class. With this one book for an example, the title-page, with its information and the value of it, may be discussed; the arrangement of the table of contents; the use of chapter and page headings; the value of marginal and foot notes; the difference between the index and the contents—all of which would save the student much time, if we are to judge from our experiences with the students who are using our libraries.

After the examination of one book the student may be led on to groups of books on various subjects. The comparison of the standard dictionaries, handbooks, cyclopædias, bibliographies, and indexes will bring out the fact that each aims to cover a certain field. All cyclopædias are not alike, and the teacher who has once compared them will not send a seventh-grade child to the treatises found in the *Britannica*, nor will she tell him to look there for the lives of living persons. There is no way so effective of impressing the student with these points as to give him practical problems drawn from his daily lessons, which shall be looked up in these books. Unless the questions given the pupils are drawn from their lives, they may have the interest of a puzzle to them, but rarely the permanent practical application to be desired. Instructors can be very helpful by encouraging their pupils to make annotated reading lists on the various subjects studied.

The making of books is an art and a craft quite possible to the child in his constructive work. The tools and materials are inexpensive enough to make it practical in the average school. It is not the province of this paper to treat of the educative value of bookbinding as constructive work, tho much could be said for it from that standpoint. Its possible correlation with art and other subjects is doubtless plain to many. It serves to stimulate the child's interest in books in general. The making of one table of contents and one index will often convert him to their use as an economic device. A few examples of the best-made books exhibited to the pupils while they are working will raise their standard of workmanship and tend to counteract an unfortunate overestimation of their own work, which some manual-training pupils have developed.

In brief, the normal schools should—

1. Furnish carefully tested lists of books for children.
2. See that the teachers they send out know the best books on the various subjects to be found in the average school curriculum.
3. Offer instruction in enough of the principles of library economy to enable the teachers to organize and administer the ordinary school library in an economical way.

4. Teach their students the book resources of the country, so that they may know where to apply for help, whether they be assigned to a city or country school.
5. Bring before their students the facts of library legislation so that they may be intelligent advisors to the people of the community to which they are sent.
6. Teach the students to be intelligent, economic users of books and libraries, and how in turn they may teach their pupils.
7. Teach those they send out to look to the public library as a public educational institution in the community, and as such to use it.

THE A B C OF REFERENCE WORK

W. I. FLETCHER, LIBRARIAN OF AMHERST COLLEGE, AMHERST, MASS.

[AN ABSTRACT]

I am here as the representative of the American Library Association, which has just closed a delightful session at Waukesha, Wis., and my first duty, a very pleasant one, is to bring you the greetings of that body.

Both associations are working together in sympathy, and now in co-operation, to advance a common cause, the promotion of intelligence and general culture. But I wish to say that I do not quite hold, with Dr. Canfield, that the public library as maintained at public expense is justified (and only so justified) on precisely the same grounds as is the public school. I suppose we are all inclined to magnify our calling, and it has always seemed to me that there is good reason why a man who has occupied the highest positions in the educational world should accept, as if it were a promotion, a librarian's position. For the library's chief office is to minister to that which is highest in man, the æsthetic and the spiritual; and its justification as a claimant for public support is, from this point of view, to be found in placing it in the same category as the public park, the art museum, or music provided for the public enjoyment and cultivation. I believe it was Senator Hawley of Connecticut who said at the dedication of the soldiers' memorial arch in Hartford that he rejoiced that there had been this large expense for something that was "absolutely useless."

One relation of the library to the school is in its helping to lift the school work by means of good literature and art into the higher region of the æsthetic and the spiritual. When Horace Mann entered so enthusiastically, sixty years ago, into the establishment of district-school libraries, his argument was that the schools might thus be enabled to make, not only the minister, the doctor, the lawyer, the artisan, but the *man*, with all his higher powers cultivated, and not merely his ability to do certain work.

Most of what we hear about the library's contribution to school work has regard to the distribution of books for reading. But there is the

other important department, which we call reference work, where teachers go, or teach their pupils to go, to the library to look up information on some subject, and this department of library work should be taught in the normal school by the laboratory method. I am to speak of its A B C. Only after I had arranged the three heads indicated by these letters in the order of what I regard as their relative importance did I perceive that it was this suggestive order.

"A" stands for Attendant; for it is one of the accepted ideas of the modern library that there must be an attendant ready and competent to meet the reader's questions, and that the reader should go directly to such an attendant rather than be sent to the catalog. People often go into a library and say: "May I see your catalog?" That is not the way to begin. Go first to the attendant and ask directly for what you want. If neither the librarian nor any other attendant is at hand and at your service, the library is not managed as it should be. But a competent attendant must have certain apparatus by means of which your questions may be answered, and with which you may become familiar, so that you may often help yourself when this busy attendant is helping someone else; and this training of readers to help themselves is one of the chief ends of the attendant's work.

My "B" refers to the apparatus which we call Bibliography. It may seem strange that I should put this before the catalog, if I had in mind anything but mere alphabetical order. But it is my conviction that bibliography belongs first. By this I mean that nothing can be so helpful in looking up reading on a subject as a well-made list of books and papers relating to it. For example, if you were wishing to read up the subject of Joan of Arc, you could be shown a long list of titles of books and articles on her, and perhaps a well-digested list which would show that some referred particularly to her visions, others to her trial for witchcraft, etc., and you could select just what you wanted. Of course, there are a great many subjects on which such lists cannot be found, but the number of cases in which they do exist is greater than even many librarians suppose. They may be found in encyclopædias, indexes to periodicals and to general literature, and in many special books.

As to encyclopædias, a word of caution should be given. One is better for one purpose, another for another, and there are many special cyclopædias and dictionaries. For example, I remember, some years ago, a teacher came to our library to see what she could find on mosaics. I was surprised to find that we had no book on the subject. Looking in Smith's *Dictionary of Christian Antiquities*, however, I found a long illustrated article on the subject, and at the end of it references to authorities, some of them being in our library.

For another example: one of our professors came to me one day and said: "I thought I knew how to use your catalog, but I fear I do not;

I cannot find anything about Phalaris and his letters." Well, we have no book on the subject, but on turning to Smith's *Dictionary of Greek and Roman Biography* there was a good article on it, with several references to other books, one of them being Berington's *Literary History of the Middle Ages*, which gave just what the professor wanted. Our catalog could not show this; and it is just such cases as these continually occurring that show how necessary it is to have recourse to bibliography. In order to make good use of a library, a teacher or an advanced pupil should get at all these keys to literature at first thru the direct aid of the attendant, but should soon come to do without the attendant's services in most cases.

My "C" is a double-header; it stands for two things, Classification and Catalog. I put classification first, altho alphabetical order would be the reverse. I do this because, as libraries are being more thoroly classified and readers are now often given free access to the shelves, the classification comes in as a better guide than the catalog. For example, one wishing to look up works on Napoleon in our library would better be shown the shelves, six or eight in number, where we have placed all the works on Napoleon and his time together. The wise attendant will come to think in a moment, with regard to any particular subject, whether the first recourse in its pursuit should be to encyclopædia; to special dictionary, as of music, antiquities, biography, fine arts; to special bibliography, meaning that someone else has looked up this subject and left a record of the references he found (what a pity to grope around after those references, if one can find such a record already made!); or to the books themselves on a particular subject, as on Napoleon, London, the steam engine, electricity, etc., using the classification in this latter case as the most ready and useful means.

As to the catalog, which I have thus pushed into the background (it might be called directory, so I could make it my "D"), I have but a few words to say. My experience gives me an increasing disrespect for the library catalog as a means of doing the kind of work of which we are speaking. The author catalog, from which we can learn whether a given book is in the library and where it may be found, is certainly the one essential piece of apparatus. But I have long felt, and often publicly so expressed myself, that our subject catalogs, do the best we may with them, are of little value compared with bibliographies (using this term in the broad sense in which I have interpreted it); and I think we shall do wisely if we slight them and bend our energies to the development of the bibliographical apparatus, and to its intelligent use by readers, with the help and guidance of the well-equipped and conscientious and devoted attendant, whom I thus make the Omega, as I made him (or her) the Alpha, of this little talk.

HOW SHALL CHILDREN BE LED TO LOVE GOOD BOOKS?

MISS ISABEL LAWRENCE, SUPERINTENDENT OF TRAINING DEPARTMENT,
NORMAL SCHOOL, ST. CLOUD, MINN.

You know the fascination there is in watching a bonfire of grass and twigs and leaves; how every little while, in the slow-burning mass, some point bursts into flame because the material there is ready. In a certain psychology class there has been a similar charm in watching minds take fire, first a flame here and then there, from reading Binet, Ribot, Romanes, or even Kant. As with the bonfire, the places which are about to catch can never be determined beforehand; hence the interest of the watching. But there are members of this same class who borrow the same books and return them, expressing great enthusiasm, and yet they never catch fire at any point. There is nothing to do but to warn such pupils to let the books alone, not to read, but to live and think for a while, stirring up the damp mass of material which is unfit for burning. They may lose every possible chance of illumination, should the warning pass unheeded.

Books may bury a mind, and there is no more pitiful sight than the child of tender years, an infant Casaubon, pointed out with pride by parents or teachers as a reader of philosophy or what not. In leading a child to love good books, the first crime to be avoided is that of considering the books first and the child second. The child is greater than the book, and the book must wait upon his needs.

Considering the child first will save us from false methods of developing interest. "Big books" read from a childish delight in praise for reading big books can only smother the poor little soul, if they do not actually induce the blight of intellectual dishonesty and conceit. Another wrong method is to force the child prematurely into a certain line of reading, as the historical, while the taste for every other form of literature is neglected.

This illustrates the danger of over-direction. A healthy child-mind, brought in contact with a good, broad library of real literature, may often be trusted to select the best material for its growth, just as a healthy animal gets from its environment only the food it can digest. The task of choosing for the child is ever a difficult one, as difficult as Holmes found the preparation of a list of books for the young westerner. "And he never sent his mental measure. It was as if he had ordered a suit of a Boston tailor, with never a hint of his length, breadth, and thickness." Alas, there is no tailor skillful enough to measure a child's mind, and we are apt to insist on outgrown baby clothes, or else on garments large enough for his elders, and fashioned in true grandfatherly style. This accounts for the misfits in our most approved book lists.

There is one general chart, however, which may save from gross mistakes, a chart of the instinctive interests which culminate at different periods of child life. As the human body passes thru certain definitely known changes to its mature form, so the mind has characteristics which may be definitely determined at each stage of growth from infancy to maturity. There are other parallels between mental and biological development.¹ "All growth is lopsided, accented now here and now there." If an instinctive impulse has no chance to gratify itself, it dies out, instead of being transformed into higher faculty. These impulses are transitory, and if they are not furnished with material at the right time, the opportunity may be lost forever, and full development of the individual may become impossible.² The philosophy of education must be based on this genetic psychology, and scientists are today busy with its problems. The references which accompany this paper are for those who wish to examine authorities on the subject. The problem of leading children to love good books can rest securely on no other basis than this, for the native interests of the child at any age are his only means of reaching out and appropriating anything whatsoever in life or literature.

This little psychological digression will account for the handling of my subject under an outline of predominating interests of three periods of child life.³ The age limit given is not a fixed one, as some children pass out of one period into the next higher earlier than the limit given, while others remain in the lower stage longer than the average time. Moreover, girls mature sooner than boys.

CHILDREN BEFORE EIGHT⁴

These little folks have a natural appetite for the marvelous. With the rapid development of the sense-cells in the brain, there is intense satisfaction in image-making, and a great lack of comprehension of the relation between the images. Stories repeat themselves in vivid kaleidoscopic pictures, and impossibilities are welcomed. This is the time for

¹ H. H. DONALDSON, *Growth of the Brain* (Scribner's, 1895), p. 374.

² A. CASWELL ELLIS, "Suggestions for a Philosophy of Education," *Pedagogical Seminary*, Vol. V, No. 2, pp. 158-201; E. B. BRYAN, "Nascent Stages and Their Pedagogical Significance," *ibid.*, Vol. VII, No. 3, pp. 357-97; NICHOLAS MURRAY BUTLER, "Status of Education at the Close of the Century," *Proceedings of the National Educational Association*, 1900, pp. 138-96.

³ EARL BARNES, "A Study of Children's Interests," *Studies in Education*, Leland Stanford University, No. 6, pp. 203-12; EDWARD SHAW, "A Comparative Study of Children's Interests," *Child Study Monthly*, Vol. II, No. 3, pp. 152-68; ESTELLE DARRAH, "Children's Ideals," *Popular Science Monthly*, Vol. LIII, pp. 88-98; EARL BARNES, "Children's Ideals," *Pedagogical Seminary*, Vol. VII, No. 1, pp. 3-12.

⁴ MARY SHELTON BARNES, "Studies in Historical Method" (D. C. Heath & Co., 1896), p. 144; CLARA VOSTROVSKY, "Study of Children's Own Stories," *Studies in Education*, Leland Stanford University, No. 1, pp. 15-18; AGNES SINCLAIR HOLBROOK, "Fear in Children," *Studies in Education*, Leland Stanford University, No. 1, pp. 18-22; G. STANLEY HALL, "A Study of Fears," *American Journal of Psychology*, Vol. VIII, No. 2, pp. 147-250; A. B. CLARK, "The Child's Attitude toward Perspective Problems," *Studies in Education*, Leland Stanford University, No. 8, pp. 283-95; JULIA GARDINER GAYLEY, "The Classics for Children," *Pedagogical Seminary*, Vol. III, No. 2, pp. 342-7; E. D. STARBUCK, *Psychology of Religion* (London: W. Scott, 1899), p. 423.

myth and fairy tale, just what delighted men when the earth was young. Flexibility and vividness are secured by this unrestrained play of the imagination. Smother the impulse now, give no chance for fancy, and the realm of literature and art is rarely entered later. If the child does not live in the story now, words henceforth to him are "mists through which to see less clear." Three women past middle age who, in the unwonted leisure of later years, are studying hard for self-improvement, asked me to help them with Mallory's *King Arthur*. The son of one had been advised to buy the book by the professor of literature at his college, with the remark that every young man should own a copy; and these three women were studying desperately to find out in heaven's name why. It was like a chapter of Cranston. Of course, there was no helping them. If they had only ridden with Sir Launcelot and Sir Tristram in quest of adventure when the impulse was strong within them as children; at the time when the greenwood, yea even the city lot, was full of damsels to be rescued and dragons to disembowel; when the front yard shook with conflict, as swords fell on grape-basket helmets and wooden spears dealt deadly blows! They would assuredly have played all this, had the story come to them then. They would, indeed, have lived it almost as vividly, while they listened to the words; and so today they might have penetrated to the heart of old romance forever shut to those not admitted as little children.

In telling stories to these children, one must take a lesson from the gloomy scene in the Shepperton workhouse when Amos Barton's "geographical, chronological, exegetical mind" tried to present truth to the paupers who had not geographical, chronological, or exegetical minds. Children are like the paupers. They care little for place, know and care nothing about time, and all explanation and preaching is lost on them.

A child's brain-cells once stirred by vivid images have no chance of having their energy called off by thought, so they respond instantly in a reflex arc of action. Action must follow action in a satisfying story with no stupid explanations of moral or motive or connection. Stevenson says of himself, even at a later period of boyhood, that "eloquence and thought, character and conversation, were but obstacles to brush aside, as we dug blithely for a certain sort of incident like a pig for truffles." Emphatic color, intense sound, either the whisper or the thunder tone, giant or pygmy size, any strong sense-impression, is delightful now.

The fears which are characteristic of these little children need light to prevent them from lasting and becoming morbid. They add a wonderful interest to the tale you tell; and if they are properly surmounted in the story, the child is helped to get rid of them in the most healthy way. The bears and wolves and tigers become very friendly beasts, and dragons and many-headed giants are so easily demolished in the story that it is a real pleasure to meet them. Some kindergartner must have gotten hold

of the baby of two who told me about a "kind and good and generous gorilla."

The child is animistic and anthropomorphic. Inanimate things are endowed with life and walk off with a gait only properly pictured by Gellert Burgess' pianos and chairs in the *Wonderful City of Ligg*. Animals are loved for the human quality in them; loved even more than people, for the child is nearer to these elder brothers of ours; so nothing interests more than *The Jungle Books*, *Wild Animals I Have Known*, *Black Beauty*, and that dear little "Grizzly" biography. The nature-study book, no matter how beautifully illustrated, receives scant attention unless these sensible children wish to find out something about a bird or animal they have already observed.

The child's interests center in the family. Books about children of his own and other lands are attractive. Primitive man interests him much, above all the Indian. Modern man lives too complex a life to be understood. The zeal for teaching patriotism often forces a country upon the little one who is still in the nomadic stage and as incapable of forming any idea of a state as a Zulu savage. You may remember an amusing article on the "Star-Spangled Banner" in last year's *McClure*. The observation is remarkably good, but the author fails to see that a child under eight may as well sing

My country tissuf the
Sweet land of libaet tea,

and think of "Hail" as Columbia's first name; for an understanding of these apostrophes is utterly beyond his range. I suspect that the sole impression left of patriotic songs is an association with joy and noise, by no means valueless.

Books about children are often selected for children's reading, with a total disregard of the child's inability to enter into the point of view of the adult. I notice that Kenneth Grahame's delightful *Golden Age* and *Dream Days* are advertised as good books for children. The tone of criticism of the treatment of children by their elders which pervades these and other admirable books for grown-ups is most unhealthy reading for the little child, whose instinctive trust in those around him is the root of his future faith in heaven. Beware, then, of the books which write about children, rather than for them. Even Field often does this, but Stevenson may be trusted to give the child-heart true expression:

The shadow of the baluster, the shadow of the lamp,
The shadow of the child going to bed,
All the wicked shadows coming tramp, tramp, tramp,
And the great black night overhead.

It is well that someone can voice the child's feeling in the poem, for the love of rhythm is one of his strongest instincts. Ballads and story poems delight him as they delighted the simple audiences of the ancient

bards. Even a prose story "should run in the ears like the noise of breakers."

This little child is not æsthetic. His taste is rude and barbaric. This does not mean that he should be surrounded by chromos, or read or listen to sentences that are not literature even in his primer or first reader. The effect of an environment full of masterpieces of painting, music, and literature will assuredly show itself at the right time, tho at present it is absorbed unconsciously. All attempts to call attention to it will fail, or else result in the moral blight which is propagated in a child's intellect when he is trained at this early age to say, "I love Whittier; he writes so beautifully," or, "Mr. Longfellow has a very clear style."

As for morals, our little child under eight is a veritable pagan in the concreteness of his theology. Abstractions, sermons of any kind, touch not him. He gathers his ideas of goodness and his impulse to be good in life from his associates; in literature, from allegories and stories so simple that you need never mention the moral.

CHILDREN FROM EIGHT TO FOURTEEN¹

This is the transition period so puzzling to the keenest child observer, sometimes called the dark age. The brain, and indeed the body, is comparatively sluggish, storing up material for the great and sudden demand made upon it in early adolescence.

This boy is intensely practical. He has no use for beautiful fancies or sentimental tales. His muscles are aching to be trained to skilled work, and his interests turn toward details. He reads invention and travel and stories of industry greedily, to find out how things should be done. This interest greatly increases if he is given opportunity to work out the ideas he gets, tho you may find him a little dangerous if he must needs scalp the small sister or lasso the baby. The books read with such interest are books of invention and travel, books of information rather than literature; but if it should ever be your lot to read Poe's *Gold Bug* to a group of these fellows and answer all their questions, you will discover in these interests a possible avenue to literature-loving.

But the boy has another instinct which leads directly to literature, the love of fighting and adventure. He wants a tale full of grim death and plenty of bloodshed. "Give me a highwayman," says Stevenson, "and I was full to the brim." This child is as far from comprehending church or state as was the child under eight, but biographies of men who have done concrete things are his favorite dish. Robin Hood, Richard the Lion-Heart, and the long list of heroes who did something the boy would care to do—these make literature which the boy loves. There is a nice distinction here which must not be overlooked. When Philip Wakem told Tom Tulliver stories, Tom liked some, but rejected others. "He had

¹ FREDERICK BURK, "From Fundamental to Accessory in the Development of the Nervous System," *Pedagogical Seminary*, Vol. VI, No. 1, pp. 5-64.

small opinion of Saladin whose cimeter would cut a cushion in two in an instant; who wanted to cut cushions? That was a stupid story, and he didn't care to hear it again. But when Robert Bruce, on the black pony, rose in his stirrups and, lifting his good battleaxe, cracked at once the helmet and the skull of a too hasty knight at Bannockburn, then Tom felt all the exaltation of sympathy, and if he had had a cocoanut at hand, he would have cracked it at once with the poker."

In the book good for the boy at this period there should be embodied in the incident which so stirs his blood, character, thought, and emotion—the vital truth of life capable of indefinite transformation in the boy's soul. But this is precisely the difference which marks off literature from sensational trash, distinguishing the epic poem from the dime novel, the *Merchant of Venice* from *Dick the Highwayman*. The boy will swallow either at first, as a child seeks a stimulating diet with no thought of nutrition. But a diet of the sound literature, with the unconscious digestion of good sense and truth, will soon produce the taste which will lead the boy to reject the poorer stuff of his own accord. It will bear repetition, however, that the literature you offer this boy will never compete with the trash, unless it has in it this element of vivid portrayal of the sort of incident he craves.

So much for the boy of this period; the girl is a much harder problem, for she usually reads a more dangerous class of books. She keeps her love of fairy tale and fancy, and this should be developed into the modern poetry and literature which have grown out of it. She seeks the love story earlier than the boy, and will delight in *Evangeline* and *Miles Standish*, which the boy at this age rejects. Her danger lies in the vast body of sentimental, false, religious novels whose weakening touch on character often accompanies the woman thru life, rendering her foolish and melodramatic, and desirous of posing as a saint where she should be strong and sensible. E. P. Roe's novels will serve for a type; Mrs. Wiggin's *Polly Oliver* is not to be trusted; and many of Miss Alcott's are not literature. The only remedy to be suggested is to let the girl read her brother's books at this period, and when the love story can no longer be ignored, give Scott and Dickens and the highest class of novels.

EARLY ADOLESCENCE—FROM FOURTEEN TO EIGHTEEN¹

This period is a critical one. Emotions develop suddenly far ahead of judgment and intellect. Art, therefore, whether music or painting or literature, is a necessity in bringing youth into its full heritage. Now, for the first time, the thoughts and passions, the realities of the great world

¹ E. G. LANCASTER, "Psychology and Pedagogy of Adolescence," *Pedagogical Seminary*, Vol. V, No. 1, pp. 61-128; GEORGE A. COR, "The Morbid Conscience of Adolescence," *Transactions of the Illinois Society of Child Study*, Vol. III, No. 2; G. STANLEY HALL, "Moral and Religious Training of Children and Adolescents," *Pedagogical Seminary*, Vol. I, No. 2, pp. 196-210; G. E. PARTRIDGE, "Reverie," *Pedagogical Seminary*, Vol. V, No. 4, pp. 445-75.

without, begin to penetrate to the young soul. Very important now are adolescent day-dreams. In them are practiced beforehand the acts of future life, and they serve the same purpose as a preparation for emergencies that play does in its development of the child's conception of life's duties. The whole breadth and fullness of after-life depend upon the range of these dreams; and the dreams are often widely influenced by the literature read. The craze for reading is a most legitimate tendency now; and such reading! Did you ever read as you read at that period, hungrily searching, searching for something greater than you had yet found, some answer to the problems that stirred you; in breathless hurry, details skipped, description skipped; generalizations, sentimental or religious, sometimes catching and copied in notebooks, sometimes skipped with the rest; worshiping now this character and now that; sure today that this book had solved everything, but finding life much the same to your great surprise—up and at the hunt again tomorrow; thru and thru the library, at a rate that horrified the elders, who could never see that reading is the main business of life, and all school lessons and home duties ought to be suspended, for the ship must "find itself" before it can be of much use in the carrying service?

There are three fates which may befall the young girl or boy at this period, which are all to be deprecated..

Most pitiful of all is that of the ignorant boy or girl, arriving at this age with no books for help, with ideas of love and marriage gained only from street and a low environment. The form work, the arithmetic, geography, and grammar of our public schools may well give way before the need of presenting these young people with noble ideas of the life they are to live, of love and marriage; for early associations in these matters cling for life. Even if results are not bad, a narrow life without horizon or atmosphere is often compelled. Our public-school teachers, our librarians, must reach this class if possible.

The second class have gotten trash, possibly vile trash, full of false ideas of life. They are the ones to be won by better books.

The third are held in by some geographical, chronological, exegetical Amos Barton who considers it a crime to read a book for what you want from it, and wicked to skip or ignore obscure allusions. These instructions carefully followed, and one classic read in this thoro manner will effectually kill all aspirations toward literature. People so trained always respect the classics, advise you to read them, buy them for their bookshelves, and are deterred from ever peeping between the covers by the associations of that aforetime drudgery.

All this comes from a lack of knowledge of the early adolescent's growing points. He is just opening his eyes on the world and should be allowed opportunity to become familiar with it. The wider the range of his reading, the broader basis laid for detailed study hereafter. The more

he lives out the life of the race in varying experience, the larger the horizon he will command when he settles down for the close logical study that should follow. Only let it be wholesome literature. Let his mind catch fire at many points so that it be from a divine spark. Novels are for him that he may understand his own social life. Poetry is his now, if ever. Philosophy and religion dipped into, and the newborn sense of responsibility and the question Why? will respond to touch. He will not study history or science with delight in each detail, as did the younger boy. He wants to try his newborn powers of interpretation and learn only what it all means. He'll get back to accurate observation and detail later, when he finds a necessity of proof of theory or of new discovery. Let him try his new-found wings. If they are clipped or bound now, he will never soar far.

PRESENTATION IN 'GENERAL

If the interests of children at different periods are consulted and the right literature is at hand, the problem of making children love good literature is largely solved.* But the presentation needs a word of suggestion. Man's power to get images from printed characters is a late acquisition. The human voice is a much older means of firing the imagination. Undoubtedly children may be best introduced to good literature by the story-teller or the good reader. There should be more reading aloud in home and library and school.

The much-edited literature with its critical notes is often so handled as to produce disgust. If the publishers only appreciated how many children in our schools have been compelled to learn the lives of the authors and where they graduated and what they wrote, before they have been allowed to laugh over *Ichabod Crane* or enjoy *Snowbound*, I believe they would omit the preface on the authors in their admirable masterpieces of British and American literature. For inducing a love for literature such preparation is as absurd as it would be to send a young man to study the family records as a means of getting him to fall in love with the daughter of the house. "I liked *Ivanhoe* after I got into it," says the boy. Begin in the middle of the book, if you can so lure the boy to read it. If he falls in love with that, he can be trusted to go back to the stupid preface.

The abbot in *Richard Yea and Nay* did not like "to have his periods truncated," but everyone who tells or reads stories to children must learn to truncate his own periods, and to judge when to do it by the faces of his audience.

A little three-year-old sits beside me at every meal, allowed to come to the same table with her elders. She demands a pickle because others seem to enjoy them. The small mouth puckers and the tears come,

* REUBEN POST HALLECK, *The Central Nervous System* (Macmillan, 1897), p. 258.

for the sourness and pepperiness are against all her natural taste; but she moans bravely, "I like them;" and soon, too soon, she will like them. No child in an environment of those who love good literature, if allowed to come to the table, will fail to acquire the taste. Probably the teacher should sing and should draw, but before we legislate in this respect, let us see that no teacher who knows not literature, and loves it not, is appointed to the charge of children of any age. A knowledge of children's interests and a love of literature in the teacher, and our problem is easily solved.

THE PLACE OF THE LIBRARY IN EDUCATION

BY MELVIL DEWEY, DIRECTOR NEW YORK STATE LIBRARY, ALBANY, N. Y.

New conditions bring forth new problems and demand new solutions. Libraries in some form are almost as old as the race. It was steam when the bobbing cover of the teakettle suggested confinement of the vapor, but how different from what the word "steam" means today! The lightning on Franklin's kite hardly gave promise of the telephone, phonograph, cable, and wireless telegraphy, and other modern miracles. The chief factor in our new conditions is quick and cheap transportation. Railroads, trolleys, express, mail, rural free delivery, telegraphs, cables, telephones compel us to readjust our ideas in the light of new conditions and possibilities. One result is the modern library.

The old education was completely revolutionized by the invention of printing; the real beginning of university extension. Once students walked hundreds of miles, perhaps begging their way, to sit within sound of the voice of some chosen teacher or to read some book securely chained to a pillar. But the volume which cost as much as a village has by the new process become as cheap as a lunch. The wisdom and learning, which had to be sought out with infinite labor, are printed and made accessible to the poorest. The world thus solved one of its greatest problems when it brought forth the traveling book, the precursor of the traveling library.

We know from our own experience and observation that the eye rather than the ear is the great gate to the human soul. Most ideas and ideals are chiefly drawn from reading. Books, magazines, and papers more than sermons, addresses, or conversation set in motion the effective currents. A recent careful investigation by educational experts as to what most influenced the lives of children showed that it was not the father, nor the mother, nor the school, but, as might have been predicted, the reading.

By common consent the supreme thing in education is the building of character; but character grows out of habits, habits are based on

actions, actions on motives, and motives on reflection. What makes most people reflect? It is usually reading that begets reflection, reflection begets motive, motive begets action, action repeated begets habits, and habits beget that supreme thing, character.

With every generation the comparative importance of reading seems to increase. It is well known that many of the delegates to meetings and conventions in which they are deeply interested seldom listen to papers and addresses, because they find they can get the ideas so much more quickly and clearly from the printed page. The eye can sweep rapidly over matters of little interest, can dwell on points of importance, can go back to verify preceding statements; with the result that in much less time the mind has gained much more. The pre-eminent influence of the printed page is thus increased by wider appreciation of its power.

On the material side the evidence is just as conclusive. The book is the chief factor in the marvelous evolution of the race. The brute has not the divine gift of speech. We admire the wonderful instincts of bird, or fox, or squirrel, but with minor variations they are the same that their ancestors have had for one thousand generations. The savage with speech and without books passes on something of his acquired knowledge from father to son, but the development is slow. Civilized man has become as a god in what he dares and does, because he stands on the shoulders of all his predecessors and utilizes the work of millions of men in thousands of years.

"For a dwarf on the dead giant's shoulders sees more
Than the live giant's eyesight availed to explore."

The Indian stripped the birch and built his bark canoe in a day. He felled a tree across the stream and his bridge was done. But our sons have taken the skill and knowledge of their fathers and increased it, each beginning where the other left off. They build a Brooklyn bridge or a ship, either of which costs as much as the land, houses, and furniture of fifty country villages. The papers tell us that the "Celtic" built this season could in her vast hull accommodate more than the whole army of guests of that other modern marvel, the Waldorf-Astoria hotel. If there were a derrick large enough, the great city hall of New York could be lowered into this marvelous evolution of the dugout and bark canoe in the natural growth of transportation. All this has been possible because the accumulated skill and knowledge has been preserved in print and passed on from generation to generation, so that we may fairly say we stand today on our lofty pedestal built up of printed sheets of paper.

No thoughtful man can question that it is a supreme concern to provide for our people the best of the literature of power which inspires and builds character, and of the literature of knowledge which informs and builds prosperity. This can be done effectively and economically only thru free public libraries. A limited number can buy or hire their books,

but experience has proved that knowledge must be as free as air or water, or it is fearfully handicapped; and the state cannot afford to allow even the smallest obstacle to remain between any of its citizens and the desire for either inspiration or information.

Even more important than the economy is the question of selection and supervision of reading. A half-dozen nations are producing 60,000 to 70,000 new volumes each year, besides the millions already published. In a great library, with trained bibliographers and careful study and organization, we find it possible only to approximate in our effort to supply each reader with what is best out of our resources. The New York State Library has 450,000 volumes, 150,000 pamphlets, 250,000 manuscripts, and a countless number of articles and periodicals and transactions of societies and independent chapters in books. Yet we have fallen short of our ideal unless we can give to each reader from this immense variety what is then and there and to him most valuable. It is a problem of almost infinite difficulty even with all our bibliographies, catalogs, indexes, lists, and trained specialists. Without such help, how often in a thousand times is there a chance that a reader would really get the thing which would best serve his wants! One who has not studied these problems carefully is dazed by the difficulties and overpowered by the importance of finding at least an approximate solution.

The whole civilized world has accepted the fact that the public-library system is a necessity, with hardly enough intelligent dissent to prove the rule. Seldom in human history has a great movement received so cordial and universal support. Historians already tell us that in the future this will be known as the library age, just as that period when the great churches of Europe were built will always be known as the cathedral age. Even tho the library is almost as old as the race, it is just now passing thru that rapid and marvelous development in public conception of its proper functions which will make our time the real birth-time of that modern institution which, bearing the old name "library," yet includes so much that hereafter it will take full rank in usefulness with our system of schools.

A glance at the development of the library idea will enable us better to predict its future, as the astronomer computes an orbit, not by study of where a body stands today, but of the track over which it has just come. The original library was a storehouse in which the books could be preserved and passed on to posterity. To get and to keep were the chief functions, while to use was subordinate. A favored few only had access to the books. Then a broadening process began. Those who could pay a certain fee might use the library. Then came the broad thought of making it free to all, but only for use in the building, as the present museum is used. The old librarian would have been as much shocked at the suggestion of lending a book as would the modern

curator of a museum if an interested child should ask to carry home the bird of paradise. Then came lending to a favored few, then to all who could pay the fee, and finally the great thought of lending free to all. But this was by no means the end. When I began work for public-library interests in New York, we had forty free public libraries and forty thousand saloons, so that, by the law of averages, a boy leaving his home in the evening would pass nine hundred and ninety-nine open doors, with a cordial welcome to the worst influences, before he passed one within which he could find the best reading at his disposal. Librarians realized that if they were to do their best work they must have the aggressive spirit and adopt the aggressive methods of those who make other enterprises most successful. Then came the branch in the larger cities, in order to reduce the difficulties of inaccessibility, and to get within reasonable distance of each home a collection of books and an inviting reading-room. The more widely scattered delivery station followed, so that the workman could readily return his book in the morning and get a new one on the way back without going much out of his usual course. Then books were sent on for a trifling fee to those who could not conveniently come after them, utilizing telegraph, telephone, and local express or special delivery. And yet all this did not meet the demand, and we realized that the new conditions brought about by cheap and quick transportation demanded new methods in solving our problem of "the best reading, for the largest number, at the least cost." Traveling libraries were sent out, and when we proved that a given amount of money would accomplish more practical good in this way than in any other, new applications were constantly found, and the few years of active work have established the traveling system as an essential part of the modern library movement.

New conditions made this new system imperative. The immense flood of new books and growing demands of readers for the latest and best in every field showed that it was impracticable to undertake to make adequate libraries at all points needed. It is cheaper to transport than to store and handle books only occasionally used, even if they were given outright to the local library. Libraries must be mobilized. Books must travel more. Of some books extra copies cannot now be had. Of most they cannot be afforded with the money available. If there were buildings and books, the immense cost of proper cataloging, classification, indexing, and reference librarians would be prohibitive. For reference purposes economy and efficiency demand a few great central libraries available by telephone and mail for consultation, and by express and mail for lending books to the entire surrounding section. The nation and each state should of course maintain one great cyclopædic library. Besides these, there will be a few more in the great universities and cities, and here and there one supported by large private endowments.

For ordinary circulation a different reason points to the traveling

principle. The number of books required is small compared with those needed for reference in studying all conceivable subjects, but there is even greater need of careful supervision in guiding this reading in a way to get the best results. Competent assistants can be found and afforded only in a few central points, but can do the work for a large territory. Beginning with 1837, New York spent \$55,000 a year in establishing public libraries in the 11,000 school districts of the state. More than twenty other states followed the example, and all had the same experience. The novelty wore off, the books were less used, and in most cases became scattered, so that, instead of a steady increase, after the first fifteen years there has been steady diminution in the number of volumes. For a library is like a reservoir of drinking water. It must have a constant fresh stream running in, or it becomes stagnant and unusable. This freshness is not dependent on the date of a book's publication, but on the time when it is first seen by that community. This is the great secret of the traveling library. Fifty or one hundred books go to a community and, being a new broom, sweep clean. There is a zest in looking them over and seeing what is available that stimulates interest and makes readers. After three or six months this wears off, but is renewed when this library is moved on to the next station and another takes its place. Thus interest is kept alive at every point, and books which used to become mere lumber after a few readings are now promptly worn out in actual service, so that we are getting better returns for each dollar than by any other method.

RELATIONS TO SCHOOLS

A total readjustment of point of view is necessary for most people. I object when one says that the library is a valuable and useful adjunct to the school, putting it on the same plane as a laboratory or gymnasium. In a broad conception of education the library and school are no longer to be driven tandem, but abreast. The library is to be recognized, not as something desirable, but as an absolutely necessary complement to the schools in any satisfactory educational system.

What we call school education is carried on by elementary and high schools, colleges, professional and technical schools, and universities, all assuming that attendance on their course is the main business of the students. What we term "home education" involves no change of residence or interruption of regular vacations, but centers around the library and includes libraries, museums, study clubs, extension teaching, tests, and credentials. Using these words in their broad senses, libraries furnish the education that comes from reading, museums what comes from seeing, clubs what comes from mutual help. The work of the school is for those in attendance. The library works with those at home. The school is chiefly for the young. The library is for adults as well, including all from cradle to grave. School work is for a limited course. The library

is for all of life. School work is compulsory, at least in the lower grades, and is a duty under a master. Library work is optional, and is pleasure under a friend. It calls for joyous exercise of the intellectual powers, which always gives most rapid and satisfactory development.

Because of these differences and the freedom from the disciplinary work of the school, libraries with longer hours and shorter vacations are less likely to be worn out than teachers. Each has his proper field of work, and librarians have no more right to expect teachers to carry their own burdens and also take on new ones, than that teachers should ask librarians to perform some of the school functions. Better results are uniformly secured where the library is not under the same board as the schools. Naturally, almost inevitably, school trustees and boards of education feel that the greatest concern of life is the school, and they will consider themselves as singularly broad-minded if they recognize the library as an unobjectionable, or perhaps a very useful, bob to the school kite. The best results can come only when the board of trustees gives its whole thought and energy to library interests, and believes them as second in importance to none. Library and school should work in the greatest harmony, but under independent boards.

The great function of the teacher, to which he should bend every energy, is to give pupils under his care a taste for reading. With this, much of the rest will follow. I should vastly prefer my own child to leave school with a strong taste for good books and a record of comparative failure in his studies, than to have him take all the honors in his examinations and begin life with no genuine liking for reading. Huxley has wisely said that to teach our boys and girls to read without provision for what that reading shall be is as senseless as it would be to teach them the expert use of the knife, fork, and spoon with no provision as to their physical food.

The old library was a reservoir concerned chiefly with gathering material. In our generation the reservoir has been changed into a fountain. The library has been an aggressive force concerned chiefly with giving out. In this work we have forgotten that reading is not necessarily good. It is a mighty engine exerting the most powerful influence for good or for evil on the human mind. Many a mother is at perfect peace thinking that her boy is on the highroad to heaven if only she finds him with his nose in a book, and yet we all know that the reading of bad books is the surest and quickest road to the pit.

Our recent library work has had to do too much with quantity, too little with quality. We have made the reservoir into a fountain, but we must give more attention to filtration. The most hopeful efforts are in the direction of careful, unprejudiced, brief notes, following book titles in catalogs, so as to help both reader and librarian to know what purpose each book can best serve. The great problem before thoughtful students

of librarianship today is not so much how to increase the number of volumes circulated, but how to improve the quality, excluding the worst, decreasing the use of the poor, encouraging the good, and aiming constantly to lead every reader to the best.

THE LIBRARY AND THE SCHOOL AS CO-ORDINATE FORCES IN EDUCATION

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We have to consider a twofold question: How can the library be made most serviceable to the child in the daily performance of his work in the school; and, how can the school life of the child be so ordered as to give him the greatest possible command of the contents of good books in his subsequent career? This double question lays open before us the whole subject of the co-operation of school and library in the training of the child.

The library is to serve as an assistant to the school in educating the child. To serve this purpose properly it must contain many hundreds of books that have been chosen because of their direct connection with the subjects upon which the child is working. One who selects these books must have a knowledge, not only of books, but of children, and of the aims and methods of school education. It is to be doubted whether even the best librarians are capable of making the selection wisely. Their view is too largely one of the books, supplemented by a more or less definite knowledge of child nature, and with but little, if any, study of present-day educational methods as pursued in the best schools. What they know of the school life of today is derived from books and from conversation, instead of being the result of personal experience.

Nor can the teachers do much better than the librarians. The trained and experienced teacher no doubt understands child-life and child-likeness better than the librarian does; but she is inferior to the librarian in a knowledge of what literature offers to the child, and her estimate of the real value of books often gives preference to that which is not of great worth. Besides, her view of education itself is liable to be distorted by the too great prominence she gives to her own special subject or department. The principals and superintendents of schools also have their limitations which disqualify them to act alone in selecting the books for a school library. It is only by the united efforts of librarian, teacher, and superintendent that a wise choice can be made.

But granting that the books have been properly selected and that the library shelves are burdened with all that can be made helpful in the school work, how can these books be best used? They must be accessible

to the children. One distinguished educator of my acquaintance advocates breaking up the library into small collections and giving to each schoolroom its appropriate share. This recommendation is open to the very serious objection that it deprives the child of the great advantage of spending many hours in a large library. More will be said on this point in the discussion of the second part of our subject. Many schools secure all of the substantial benefits to be derived from the small collection of books in each room by permitting each teacher to draw a large number of books and keep them in her schoolroom for several weeks. In our own schools we follow this plan, with the limiting provision that any teacher who has had a book for two weeks or more must return it if it is called for by another teacher. If the library owns several copies of the books most in demand, the needs of all teachers will be well met, and but few books will be called in before they are returned voluntarily.

The teacher who has on her shelves from ten to fifty such books carefully selected with reference to her class work for the succeeding few weeks will find constant occasion to use them in class and will be able to induce many of her pupils to carry them home to read. This will lead by the easiest transition to the regular use of the main library by her pupils. In addition to the books that are intended to be read thruout, there must be provided a large number and a great variety of works of reference to which the children may come for aid on special points or topics. Many of these works of reference should be permanently placed in the schoolrooms, but others can be given to the teachers for use in the same manner as the books from the circulating department. It is important for the library to own at least two copies of each of these books, so that one may always be found in the reference room of the general library.

But this is only one side of our question. Not only must the library be so used as to assist in the education of the child, but the school in its turn must recognize its duty to equip the child for the future enjoyment of the library. Two worlds offer their riches to every youth who steps out from the threshold of the school—a world of affairs and a world of books. Happy he who is well prepared to participate in both! There is a kind of education that addresses itself to preparing the youth for the world of affairs. So clamorous for quick success is the everyday business world that its spirit has not only invaded scholastic halls, but has in some quarters set about ejecting the time-honored occupants. We cannot digress here to discuss the right extent to which this spirit should prevail in education. It is the purpose of this paper only to note its insistent claim to increasing recognition, and to protest against any form of education that undervalues the riches of the world of books.

But there is a kind of education more reprehensible even than this; for, while it is based upon the use of books, it does not prepare for the

enjoyment of the riches of the library. It sets down its deluded votary between the two worlds that we have mentioned. He is not fitted to make his way in the world of affairs; neither has he entered into the deeps of literature, history, and philosophy. He has been taught to worship form; for his training began with words, continued in words, and ended in empty words. Of such a character is too much of the formal training of the schools.

In contrast with these one-sided forms of education, how much more to be desired is that complete training which not only familiarizes the youth with the world of affairs and enables him to command success in any chosen line of effort, but also prepares him for a full enjoyment of the wider, deeper life of letters! How can school life be so ordered as to contribute to this result?

Personal contact with a large, central library is essential. Even a good library in each school building does not fully serve this purpose. The growing student must be able to drink in the love of books and to become fully imbued with the library spirit by hours and days spent delving in a large collection of books. The place has, perhaps, more to do with this development than we are aware. No amount of discussion about books, their contents and their authors, can take the place of actual familiarity with the books themselves. The student's school life, then, must be so planned as to call for frequent visits to the library—not mere calls at the circulation window, but periods of systematic research in the books on the shelves. Even quite young children, those not more than twelve years of age, can have their work so planned as to call for this library research. The subjects of geography, history, and literature alone afford ample opportunity for such work; but we as teachers must bear in mind that we are just now discussing the preparation of the child for the future use and enjoyment of libraries, and we must not base our library research work upon the school studies as they now stand. We must inquire along what lines of library research the pupils should become interested, and then we must make provision for those lines of effort in our school life. This may disarrange some of our nicely adjusted outlines. It may make waste paper of some fine-spun courses of study which have not been revised to meet new educational ideals and conditions, and it may cause a world of annoyance to those teachers who have the routine of their annual work so habituated that they need no thought for new work or new methods, but find that a look at the calendar will bring up the appropriate lessons, words, gestures, and facial expression for the day. But if this change is based upon a careful study of the true needs of the children, it will fully justify its iconoclastic tendencies.

The student should gain complete mastery of a limited number of representative books. The contents of these books should become his

mental possession absolutely. And he should know, not only what they say, but how they say it. All of their illustrative examples and allusions should be familiar to him ; and he must especially be trained to see what these examples and allusions are used to illustrate and enforce. Our knowledge of books is too often weak at this point. We are familiar with the anecdotes, the scenes, the parables, without troubling ourselves greatly with the context. The very point of view of the book, in so far as it is good, must become the student's point of view. Such an absorption of a book into one's life is safe only in the case of comparatively few books ; but it is the duty of the school to select these and to secure their complete assimilation in the lives of the children.

Besides this intense study and complete mastery of a few books, the school must plan to give the child a wide knowledge of the character and contents of the books that he has not read. This cannot be done by catalogs and tables of contents. The child must handle and examine the books themselves, gleaning a little here and a little there by his own personal efforts. Lists prepared by librarians, lectures delivered by teachers, and short-cut manuals by short-cut authors will give him only the belief that he knows what in reality he does not know. The young farmer must learn of soils and crops by holding the plow and by gathering the grain ; he who would succeed in business must feel the touch of checks and drafts between his fingers ; and he who would have a working knowledge of books must handle books. It is the duty of the school, not only to give him this opportunity, but so to arrange his work that he cannot evade it. In this connection it should be said that children should be taught the intelligent use of the index of every book in which they work, and that they should know all of the great reference works and their plan of arrangement, so as to be able to use these works economically.

The child must also be given a knowledge of the writers of books both past and present, and this can be done in a large library much more quickly, easily, and thoroly than in any other place. Here he is surrounded by the works themselves that came from the authors' hands ; and on the walls are portraits ; in the hallways and rooms are statues, busts, and tablets ; and even the exterior of the building is so ornamented as to do honor to the great names of literature. Those who come and go, as he loiters, all seem to have a wholesome respect for the place and for all who have contributed to its enrichment. Shall he alone go from its portal uninfluenced by all of its appeals ? Shall his school hold him to such a grind of routine, or be so grossly commercial, that he has neither time nor inclination left for this beautiful and hallowed society of books ?

PAPERS AND DISCUSSIONS

THE LAW AND THE DAY SCHOOL FOR THE DEAF

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By a potent recommendation, thru an executive message to the legislature of 1899, the late Governor Pingree inaugurated a movement favorable to the instruction of the deaf by the oral method, so called, thru the medium of day schools. The beneficiaries of this education, including the families and friends of the pupils, will ever hold him in grateful remembrance for this successful effort to restore the deaf in Michigan to the society of the hearing and to a better citizenship. Without first creating an organization adapted to educating the public at large up to a point of accepting new methods, it is difficult to add a new department of instruction to the state's educational system.

It is not, however, impossible of accomplishment, if, as in this state, the movement is fortunate in obtaining first the indorsement of the chief executive, the press, and a few of the leading members of the legislature. Thru all of these means both the necessity and the desirability of the instruction of the deaf by the oral method in day schools were established. Much assistance was rendered the cause by Mr. A. W. Smith, of Cleveland, O.; Mr. Robert C. Spencer, of Milwaukee; and Dr. Alexander Graham Bell, of Washington. No assistance was received from the state institution. Deaf children cannot be educated in institutions as economically as in day schools, and this fact appealed strongly to such members of the legislature as did not have the inclination to examine the merits of the methods employed and the results obtained. It will not be difficult to procure the passage of a similar law in other states when a like environment is thrown about the attempt that procured its passage in Michigan as well as in Wisconsin. The Michigan law, after a trial of nearly two years, has proven to be very satisfactory, easy of construction and application, devoid of intricate machinery for the establishment of schools, and easily harmonized with the school laws of the state. It may be found in the Public Acts of Michigan for 1899, on p. 266, and can be safely followed as a mode in other states, subject to such modifications as the state constitution and school laws may require.

Briefly, its provisions are as follows:

The local school board, generally acting upon the petition of the parents of deaf children, makes application to the superintendent of public instruction for permission to establish and maintain a school for the deaf.

It is mandatory upon the superintendent of public instruction to grant permission

where there is an average attendance of not less than three children over the age of three years, whose parents or guardians reside within the state.

The local board, after the establishment of the school, is required to report its condition, and such other facts as may be required, to the state superintendent.

The state treasurer is directed to pay the local board, out of the general funds of the state, the sum of \$150 for each deaf pupil instructed in the school for nine months during the school year, and a part of such sum apportioned to the actual attendance of such pupil.

The funds received from the state must be kept separate from the other funds of the local board, and can be expended only for the payment of salaries of teachers and for school appliances, all other sums unexpended being returned to the state treasurer.

All teachers in such schools are appointed and employed as all other teachers in the public schools are appointed and employed.

All applicants for positions must be qualified by having special training for teaching and also special training in the teaching of the deaf, including at least one year's experience as a teacher in a school for the deaf.

The oral system shall be used exclusively, but if, after nine months' trial, any child shall be unable to learn by the oral method, no further expense shall be incurred in the attempt to educate it. Any person of sound mind who, by reason of defective hearing, cannot profitably be educated in the public school as other children are taught, shall be considered eligible to enter any of these schools.

It will be noticed that the law is general in its terms, leaving the details to be worked out by the different authorities charged with the duty of executing it. There is danger always of conflict of opinion upon a subject of this nature. It was deemed wise, therefore, to close by law the matter of the advisability of the establishment of these schools, and to prevent a disagreement with the superintendent of public instruction by making it mandatory upon him to issue the permit when the local school board had decided it necessary to establish one of the schools.

It was deemed expedient also to eliminate all questions as to methods of instruction by requiring the oral system exclusively, leaving no room for the disagreements existing between teachers of the deaf. It secures, therefore, uniformity in methods of instruction, so that a child may go from one school to another, and its education continue as it was begun.

It fixes the expense to the state at a like sum for each pupil, leaving no discretion upon this subject to any authority except the legislature, trusting the local board, however, to represent it in making the expense reasonable. The salaries of the teachers are fixed by the local board, and range from a minimum salary of \$800 upward. The law was flexible upon this point, in view of the lack of uniformity in the qualifications of teachers of the deaf, and by reason of the difficulty in obtaining a sufficient number of teachers to take charge of all the schools who used similar methods of instruction.

The provision relative to the qualification of teachers was made just strong enough to prevent persons wholly inexperienced in this branch of education from obtaining positions, and this must continue to be the

condition of the law upon this subject in this and other states until the services of expert teachers of the deaf can be more easily obtained, or until the training given them at the institutions and training schools is more nearly uniform than at present. I trust I may be pardoned if, as a layman, I suggest the necessity of a closer union between institutions graduating teachers of the deaf, with a view to requiring all their graduates to attain something like equal degrees of proficiency. If this is not done, it may be necessary to fix the qualifications in the organic law of the school, altho there are many reasons why this is not desirable, chief among which is that the growth of the work in new fields will be retarded. The discussion of methods to be employed, when coupled with an attempt to determine the qualifications of a teacher, is quite likely to confuse the patron of a school, and result in the child's return to the institution.

The law makes it mandatory upon the local board to furnish all necessary appliances, which make it possible for partially deaf children, and especially those who are indigent, to have the advantage of all new appliances and devices which may be invented for their benefit. This provision has been found very beneficial, especially in view of the competition between the institution having ample funds for this purpose and the day school. It was deemed advisable at first by the proponents of the law to make a provision for the partial maintenance and care of indigent children attending day schools, but this was finally dropped in response to the general plan of the law, which is to place deaf children in all respects upon an equality with others in obtaining an education.

It is this general underlying principle to which its success can be mainly attributed. It cannot be denied that a deaf child should have the right to an education and continue to be a member of the family, enjoying the comforts and experiencing the sorrows of home. Its deafness should not be an excuse for depriving it of the care and nurture of the family during the most tender years of its existence. To compel a child to become separated from the family, and to be educated at a state institution, with all the suffering attendant upon the process, both to the parent and the child, savors of barbarism, however well-meaning the state may be in so doing. There was a time when the deaf were confined in the same institution with the insane. There will be a time when only two classes of deaf children will attend state institutions: first, those who belong to indigent parents or are orphans, and must therefore become wards of the state in order that their physical wants may be administered to, that is, those who belong to the same class as hearing children that now find their way to state homes for children who are abandoned or neglected; second, those who desire a higher education than can be obtained at the local high schools and academies, or who seek to obtain a technical education, which the institution for the deaf can alone provide.

It seems to me, from observation during the last two years, that there should be provided by the state, in addition to day schools, opportunity for the special instruction of the deaf in certain trades and professions at the state institutions, and that special privileges should be extended to the deaf child studying the higher branches, to the extent of providing for its entire maintenance, if necessary, during this course of instruction. To carry out the plan of fully restoring the deaf child to the society of the hearing, the higher education should not be undertaken until it has reached the age where all danger of its tendency to seek the exclusive society of the deaf has passed.

I will not attempt to go into a detailed study of the subject at this time, but this subject of the relation of the state school to the day school is a fruitful field of inquiry and study for the friends of the deaf. When the state institution appreciates the opportunities that are before it in this regard, it will no longer maintain an unfriendly attitude toward the day schools, because it will have the same interest in them that the college and university now have in the public schools and academies, and will be concerned chiefly in encouraging them, and in insisting upon a higher degree of proficiency on the part of teachers and pupils all the time. The time when harmony and unity of purpose shall exist between the state institution and the day school can be fixed only when it is known to what extent the day school will be the principal means of giving an education to the deaf. In one or two of the states this can be determined now, but unless better facilities for organizing schools than now exist in many of the states are found, it will be delayed many years.

The friends of the law have discovered that the existence of the law itself results in the establishment of but few schools, and that, notwithstanding the efforts made to give to the law the widest publication possible thru the press, and notwithstanding that established schools and the methods of instruction have been widely advertised thru the daily press, yet the establishment of other schools does not result without special effort.

A large percentage of the deaf are in indigent circumstances; many of them are the children of parents only partially acquainted with the English language; while others are either indifferent or discouraged by reason of the child's condition, and thus make no effort to better its educational advantages. I believe this fact to be well established that, without the special work of an expert instructor of the deaf, who at the same time has the ability of an organizer, day schools for the deaf will not grow in number very rapidly, and, indeed, in many communities will never be established.

The schools now established in Michigan and Wisconsin, so far as I know, have all required the services of an organizer having special fitness

for the work. We are just learning that all teachers of the deaf, however proficient they may be, are not well equipped to organize schools. The work of organizing seems to require an ability that but few expert teachers of the deaf possess. Great care should be used in selecting the organizer, because, if the field is once canvassed and the effort has failed, new difficulties are added to further work in the same direction. The work of organization should be directed from some central authority, and in accordance with some well-defined plan, adopted by either the state or an interstate organization of the friends of the deaf, unless it is undertaken by the state itself. This latter plan seems to me to be the most feasible, especially where a number of day schools are already established and the methods of instruction have been thoroly tested. There should be connected with the department of public instruction a superintendent or supervisor of day schools for the deaf, whose duty it would be to pass upon the qualifications of teachers, to have general supervisory control of the schools, with power to regulate the curriculum of studies, books, and appliances to be used therein, and who should be charged with the duty of organizing schools and enforcing the laws compelling the attendance of pupils.

It is said upon good authority that there are between three and four hundred deaf persons of school age in the state of Michigan who do not attend any school, and that a like proportion obtains in other states. Wherever a day school has been established, the compulsory educational law applicable to hearing children can be enforced, but their attendance cannot be compelled at the state institutions, involving, as it does, the removal of the child from the possession and immediate control of the parent. This condition alone should warrant the employment of a supervisor or superintendent of schools for the deaf. In some of the smaller states, where there would be but few of the day schools, the time of such superintendent or supervisor could be divided between other duties connected with the office of superintendent of public instruction and the interests of the deaf. The creation of such a position, with its duties, in each of the several states will require time and much labor preliminary to its accomplishment, and must of necessity follow the passage of a law creating the schools and the establishment of one or more schools under it. In the meantime, I may be pardoned perhaps if I suggest that all work done in the future for the deaf should be under the supervision of one general organization, managed as work of this character is generally done, and constituted of a membership composed of leading educators and friends of the deaf in the different states. Such an organization should be under the control of the friends of the oral methods, who favor the day school in preference to the institution, but who, of course, are at the same time willing to aid all efforts to promote the teaching of speech to the deaf in institutions.

By means of such an organization the progress of the work in the different states, its needs and requirements, could always be determined. The influential friends of the deaf who would be willing to aid in the passage of proper laws for the establishment of schools would be known, and a state organization perfected to further the work. Thru the excellent work done by Dr. Bell, the Census Bureau has obtained a more or less complete list of the deaf children and their parents thruout the whole country. Thru such an organization, communication with the parent would be established, literature distributed, and a general awakening of interest accomplished. While it is true that a state organization might accomplish all this, the history of the movement seems to teach us that state organizations rarely or ever precede the passage of a state law and the establishment of schools. Such an organization would supplement the great work already done for the deaf by giving to it a tangible form, by way of a more detailed effort to pass a law in the several states. Valuable as its services might be in this direction, it seems to the writer that it would render an equally valuable service in other directions, to a few of which I take the liberty of referring. First, it seems to me, as a layman only, not as an expert teacher of the deaf, that so-called training schools for teachers of the deaf should be under the control, as to the degree of proficiency of its graduates, of some national organization. As a general rule, the parent of the deaf child is wholly unacquainted with the methods of instruction, and a local school board does not find itself much better qualified to pass upon them. Both are wholly unacquainted, as a rule, with the training required to make an expert teacher of the deaf, and therefore persons who have had some experience in the teaching of the deaf, whether by the sign method or otherwise, are quite as likely to be employed as those who have had special training in a proper school. The state institutions are constantly sending out into the world persons who have had the care of their children, all seemingly well equipped, so far as the public knows, to continue the work. If a general organization—which would, of course, be recognized as authority on the subject—would undertake to recommend graduates of schools fully equipped to produce expert teachers, and deny recommendations to graduates of other schools, it seems to me that great good would be accomplished. Persons selected as organizers should also be recommended by it. The work to be done with legislative bodies should be under its immediate direction and control, or of its agents authorized to speak for it. It should aid in procuring teachers for schools and aid graduates of training schools to obtain positions. It should aid local boards in procuring the establishment of schools; furnish legal opinions when necessary upon the law creating them. I might multiply many times the list of services which such an organization could render to the cause of the deaf, if time did not fail me; but, briefly, it should render

such services as the State Phonological Society of Wisconsin and the friends of the deaf in Michigan have rendered in their respective states, with such other and further services as its more extensive jurisdiction would require.

In this paper I have given you the views of a layman for what they are worth, conscious only that they are given with the hope that to some extent they may aid the cause in which we are all so deeply interested.

THE STATE IN ITS RELATION TO THE DEFECTIVE CHILD

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The education of the defective child, so far as the state is concerned, cannot be considered without regard to the education of the normal child. I have been in some institutions for unfortunate children—deaf, blind, or feeble-minded—so ably managed and splendidly equipped as to almost make one wish he had been born unfortunate. I have been in some public schools intended for normal children that could make one wish he had never been born. Three years ago a police census in New York city showed that there were 702,162 children of school age in that city, but of these only 468,229 were enrolled in either public or private schools. The average daily attendance was indeed only 338,184. We are doubtless properly shocked when we learn this about New York city, but, like jesting Pilate, we stay not for answer when the same question arises concerning our own community. This is a nation of 76,295,220 souls. Of this vast number approximately 21,830,774 persons are between the ages of five and eighteen years. Yet the official figures for the closing days of the nineteenth century show that of this total number of boys and girls of the age just stated but 16,511,597 were enrolled in schools, public and private, elementary and secondary. Nor are the needs of the normal child within the school fully met by the state. Overcrowded classes are criminally chronic and common in most American school systems; the evil of half-time classes equally abounds; adequate school buildings and adequate equipment are lacking everywhere. "There are thirty thousand children in Chicago," said the educational commission which a few years ago investigated the educational conditions of that city, "for whom full and fair provision is not made. Thirteen thousand are in rented buildings, which are in many particulars entirely unsuited for school purposes."¹ The state has not yet solved its problem touching the education of the normal child, whether we consider the child who is within or the child who is without the school.

In its efforts to meet the needs of the normal child, however, the state

¹ *Report of the Educational Commission of the City of Chicago, 1899, p. 172.*

is brought face to face with its duty toward the defective. Awakening to the frightful sacrifice of child-life which is resulting from a combination of causes—individual inertness, the ignorance or rapaciousness of parents, the unethical and ruthless organization of industrial life, and the uninstructed indifference of the church—the state, in its effort to preserve itself and to protect the individual, is slowly but steadily extending its compulsory school laws, and forcing all children up to thirteen or fourteen years of age into, particularly, the public schools. The immediate result of this, however, is to force more and more on public attention the demonstrated fact that the school as an institution of civilization is conditioned in its existence and for its proper functioning, not simply by the presence of the normal child, but also by the absence of the child physically, mentally, or morally defective. Neither the public nor the private school can do its work properly and successfully when hampered by the presence of children widely divergent from the normal. How intensely must one be diseased—physically, mentally, or morally—to be educationally quarantined? How extensively must one be defective—physically, mentally, or morally—to be thrust from the school? How completely must one be degenerate—physically, mentally, or morally—to be excluded properly from the training primarily designed for normal children? Under the operation of compulsory school laws these are becoming burning questions. With the crowding today of heterogeneous masses into our public schools, there arises the imperative need of some authoritative method of detecting and weeding out those that are widely divergent from the normal. Aside from the question of the danger to society of dependent, defective, and delinquent classes—aside from the positive disadvantages to these classes themselves, in not being taught by methods that meet their specific needs—the school cannot do its whole duty to the normal child when handicapped by the presence of those who are abnormal.

The first proposition which I wish to lay down, therefore, is that the primary duty of the state, so far as defective children are concerned, is to pass such legislation as shall render their presence impossible in classes primarily designed for the normal child. The importance and necessity of such legislation are not to be underestimated. So far as the public-school system is concerned, what we need first is an adequate investigation of the facts and an adequate method of ascertaining them. A superintendent of one of the largest cities in the United States informs me that his efforts to ascertain the number of exceptional, backward, and defective children in the public schools were practically unavailing, because of the impossibility of relying on the judgment of teachers and principals as to who were mentally deficient and who not. The system of voluntary medical inspection being adopted in many cities may ultimately lead to the opportunity of making use of trained physicians for

this purpose. Even with the ordinary methods of common-sense inspection, however, it has developed that in large school systems there is a considerable number of children, whose specific needs are not only failing to be met, but whose presence is a constant menace and handicap to normal pupils. In Providence, Boston, Chicago, New York, Philadelphia, and other cities, the "special school" is making its appearance in connection with the public-school system, and I am glad to be able to say that the special schools started in Philadelphia two years ago, under the initiative of voluntary associations and individual contributions and enterprise, have in the last month been taken fully and formally under the control and support of the municipal authorities.

But the attitude of the state toward the defective child is not and should not be wholly negative. A second proposition I wish to lay down, touching the relation of the state to the defective child, concerns the necessity of a clearer conception and a stronger conviction of the needs, powers, and possibilities of the so-called defective: the state should distinctly recognize the defective as a subnormal rather than as an abnormal class, to be carefully distinguished, on the one hand, from the diseased, and, on the other hand, from the degenerate, and liberally provide with the specific training necessary to make these individuals useful members of society and capable of some measure of individual perfection and pleasure.

If, under a wise system of school organization, no child who falls into any of the abnormal, or even subnormal, classes should find a place in schools organized for the normal child, the determination of what constitutes abnormality becomes a scientific question of more than academic importance. In another connection I have ventured to suggest that the most complete type of the abnormal individual is characterized by disordered body, disordered consciousness, and disordered conduct; and that within each of these types we may distinguish classes which may be scientifically distinguished as diseased, defective, and degenerate. The physically diseased, the physically defective, and the physically degenerate are types clearly made out. The mentally diseased, the mentally defective, and the mentally degenerate, as well as the morally diseased, the morally defective, and the morally degenerate, are only beginning to receive clear recognition. This classification suggests that society has yet failed to observe the desirability and importance of distinguishing between the abnormal and what, to borrow a term from Professor Cattell, may be called the subnormal. The blind and the deaf should not be placed under the same ban as the degenerate, the idiotic, and the criminal. On the other hand, the operation of compulsory school laws, and increasing psychological intelligence in the management of private institutions, are forcing upon public attention the question whether we do not grossly abuse the terms "idiotic," "imbecile," and "feeble-minded."

It is an open question whether there is not a class or classes of subnormal children, previously carelessly classified as feeble-minded, idiotic, or imbecile, who are simply defective in more or less definite brain-centers in the same way in which the blind and the deaf are defective, and who, therefore, under proper psychological and pathological diagnosis, might have their cases met pedagogically as effectively as we now meet those of the blind and the deaf. The practical elimination of the adjective "dumb" in connection with the deaf, which as a consequence of higher scientific intelligence has now been accomplished, suggests similar possibilities in connection with other unfortunate children whose defect may be chiefly physical and local. The movement for special schools for backward children is one of the most hopeful and wholesome in connection with our educational system. The development of day schools for the deaf in connection with public schools, and of books especially adapted for the blind in connection with public libraries, are among the most encouraging phenomena in the organization of modern society. We may only ask that the enthusiastic promoters of these movements shall preserve a proper sense of proportion, and not become oblivious to the primary and pressing importance of meeting the urgent needs of the normal child. It is to be hoped that we shall always have enthusiasts for every cause. It is sufficient if we remember with Hobbes that it is not those who carve the images, but those who worship them, that really create false gods.

Concomitant with the need of legislation which shall free our schools from the hampering influence of both the absolutely abnormal and the subnormal, and concomitant with the development under state supervision and state support of adequate, sufficiently diverse, and intelligently organized and administered institutions for subnormal individuals, we have a right to expect stronger state measures for the prevention of dependent, defective, and delinquent classes. So far as these classes are caused by hereditary rather than by social conditions, the duty of the state is plain. The physically diseased can only beget the physically diseased; the idiot and the imbecile can only procreate and perpetuate the idiot and the imbecile; from criminals only criminals can come. These are beginning to be recognized as sociological laws which have as sound a scientific basis as the law of gravitation or that of multiple proportion. Again and again has the state been advised of the remedy which lies within easy reach. It must do more than acknowledge the dictates of science and of experience; it must act upon them. In the sterilization of the sexes it has a remedy as simple as vaccination—easy, harmless, sure, and benevolent. My last proposition, therefore, is that the state in its treatment of the abnormal individual must combine with its policy of protecting benevolence a policy of progressive elimination and annihilation.

If the principles which I have set down are correct—and I believe

they are—the program of progress for this section of the National Educational Association seems to me to be plain. The first need of educational science is facts, accurately observed and recorded. With these we may proceed to interpretations upon which future educational policies may be based. I believe this section would render great service to the cause of education if it were to promote (1) a compilation of the constitutional, statute, and municipal legislation of the United States which makes provision for subnormal and defective classes, classified on some scientific principle and with some regard to the types of defect for which provision is made; (2) an investigation of the actual number of subnormal and abnormal children who are daily attending public schools; and (3) a compilation of marriage laws in their bearing on the prevention of pauperism, insanity, and crime, and of other legislation the purpose of which is the prevention of the procreation and perpetuation of diseased, defective, and degenerate members of society. I believe, further, that this department would do perhaps much in promoting a better public understanding of the cause which it represents if it were to change its name to the Department for the Education of the Subnormal.

In these days, when we no longer confound state and government, we are frightened by no cries of "paternalism," nor have we any misgivings as to what the state may not undertake in preserving life and liberty and in promoting equality of opportunity in the pursuit of happiness. It only remains for the educator, therefore, to arouse public opinion and to guide those in immediate charge of the affairs of state, that they may act intelligently in dealing with the least among God's creatures, the defective child.

SOME RESULTS OF HEARING TESTS OF CHICAGO SCHOOL CHILDREN

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In this age of books and laboratories it still remains true that wherever instruction is imparted the unimpaired use of the sense of hearing is an almost indispensable necessity. I need only remind you of this to be assured you will agree with me that the ability to hear well is intimately connected with the pupil's power to make satisfactory progress in ordinary school work. The department of child study and pedagogic investigation of the Chicago public schools, since its inception in September, 1899, has made, merely as part of its work, careful tests of the pupils' hearing in every school it has visited. The data obtained are all the more valuable as those schools were chosen which were as free as possible from the disturbing noises of the city, and which would represent, as far as could be expected, normal, healthy Chicago children.

The tests were made with the use of the audiometer invented by Professor C. E. Seashore, of the Iowa State University, and which is described in detail by him in Vol. II of *Studies in Psychology*, issued from that university. Of course, before anything like a comparison of hearing tests of children can be made by investigators, some standard or basis must be decided upon. So far the problem of making a universal standard has not been solved. Results given in terms of the investigator's watch or voice certainly cannot be compared, nor satisfactory conclusions deduced from them. It is believed that the audiometer has merits never before seen in an instrument used for the purposes of testing hearing. The apparatus consists of an induction coil, a battery, a galvanometer, a resistance coil, switches, and a telephone receiver, all done up in a convenient and portable hand-box. By turning a switch the dry battery can be thrown into the primary circuit of the induction coil. Another switch turns the galvanometer into the circuit. Then, by varying the resistance by means of plugs, the fall of potential over the primary coil can be made constant as indicated by the galvanometer. The primary circuit can be opened and closed rapidly by means of a key, and, as no stimulus can be produced save when the current is closed, the making and breaking of the current makes sharp clicks, which serve as a stimulus whose intensity can be varied at will by means of the secondary coil. This secondary coil is wound in forty sections, arranged in a series on the basis of the number of turns of wire that each contains. Each of these sections is connected with the surface terminals in such a way that the number of sections indicated on the scale can be thrown into the circuit by a spring contact, and by moving the carriage along the scale to the proper terminal one can vary the energy communicated to the receiver in this circuit. In determining the relation of stimulus to sensation the inventor has followed the psycho-physical law, so that the ratio of the increments in the sound is such that the forty grades in the series are as far as possible psychologically equal. A tentative norm was taken by testing the hearing of intelligent, active, healthy persons of all ages. This served merely as a guide for the work, and not as an absolute criterion. The work with the seven thousand pairs of ears, each taken individually, served to make its own standard. In the early thousands the position of the norm began naturally to appear. Thus, if 85 or 90 per cent. of the pupils tested, and who were found by the other tests to be normal, healthy Chicago children, were marked at a certain number, the position of the norm could be determined with reasonable accuracy.

The test was made in the following manner: As the pupil entered the quiet room, he was seated at one end of a table, at the other end of which the operator sat. With the receiver at one ear and the other ear closed to exclude possible disturbances, by slightly pressing the tragus of the ear backward, the pupil awaited the signal for the test to begin. At first

the register was set at such a part of the scale that a distinct clicking sound could be heard. The sound was then made to decrease in intensity until the point was reached where it could no longer be sensed. This descending threshold was then marked. In order to rid the test of the errors of expectation and the trace of after-images, care was taken that the responses were not uniformly in the affirmative. As the limen of hearing was approached, the current was alternately turned off and on, while all the movements of the experimenter remained uniform; and these blanks in the sensation series served as a guide for the subject as the experiment progressed, and as a check upon the accuracy of the responses for the operator.

The experiment was further checked by proceeding in the opposite direction, i. e., from below the threshold of hearing to a point where the sound was distinctly sensed. The results secured in these two ways were averaged and the pupils' record obtained.

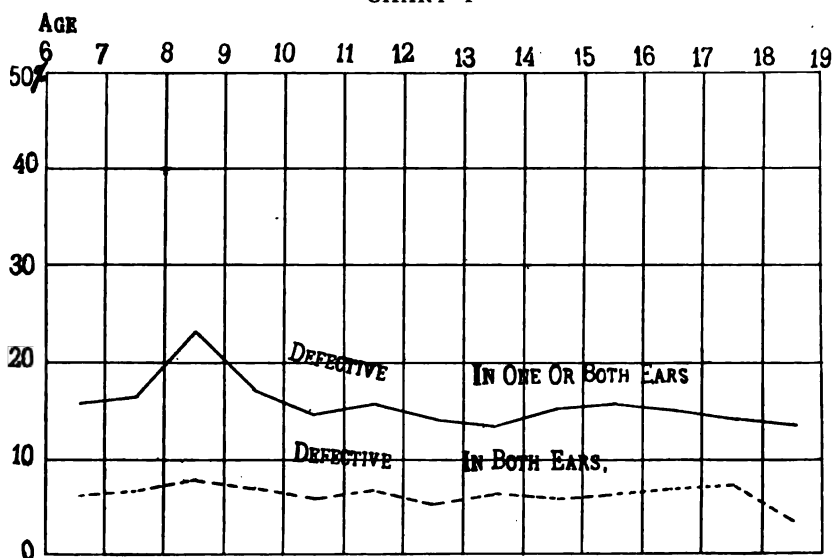
In considering such an important subject as the hearing of school children, the number of problems that emerge is almost illimitable. I am reminded, however, that there is time only for a brief consideration of a few of them. The first that naturally appears is the relation between hearing and school life, or a comparison of the number of defects found at the different ages. In the study of this problem the pupils were grouped as to age by years, and at each age the per cent. of pupils having defective hearing was calculated. A pupil is classed as "defective" when it is found from his audiometer record that he would be seriously inconvenienced in detecting sounds of medium intensity, i. e., four or more points below the norm.

TABLE I
SCHOOL LIFE AND HEARING

AGE	NUMBER OF PUPILS TESTED	DEFECTIVE IN ONE EAR OR BOTH EARS		DEFECTIVE IN BOTH EARS		DEFECTIVE IN RIGHT OR LEFT EAR	
		No.	Per Cent.	No.	Per Cent.	No.	Per Cent.
6	341	52	15.2	22	6.45	30	8.79
7	473	76	16.0	32	6.97	44	9.30
8	545	123	22.56	47	8.62	76	13.94
9	555	96	17.29	39	7.02	57	10.27
10	598	88	14.71	38	6.35	50	8.36
11	558	88	15.77	39	6.98	49	8.79
12	608	86	14.13	31	5.09	55	9.04
13	599	82	13.69	35	5.94	47	7.75
14	664	103	15.51	38	5.72	65	9.79
15	664	108	16.26	39	5.87	69	10.39
16	555	84	15.13	40	7.20	44	7.93
17	377	56	14.85	29	7.69	27	7.16
18	192	38	14.59	8	4.16	30	10.43
Totals...	6,729	1,080	16.05	437	6.64	643	9.55

It will be seen that on their entrance to grade work in school at the age of six years, 15¼ per cent. of the pupils are found defective in aural acuity. One has only to reflect for an instant upon this fact to recognize its significance. In following the movement of this curve thruout the school years one can readily observe the general trend of these defects. The per cent. of children having defective hearing increases rather rapidly in early school life, reaching its highest point at the early age of eight years. After all allowance is made for the fortuitous character of making tests not entirely objective with children under ten years of age, and for the climatic conditions of Chicago, the rise of the curve is very remarkable. It

CHART I



probably means that catarrhal affections and children's diseases are beginning to make inroads into the young lives, and indicates quite clearly the inability of the organism to adapt itself readily to this sedentary life.

From the age of eight the curve gradually descends, until between the years of twelve and a half and thirteen and a half the per cent. of defects is at a minimum. At thirteen years of age it is found that only 13¾ per cent. of the children have defective hearing. This in itself is very important, but doubly significant when one considers that it is the period in which an exaltation of all the powers takes place, a time of greatest growth and development, when not only increased power in all directions is found, but, according to many reliable statisticians, the lowest mortality.

Practically the same story is told when one considers the number of children found defective in both ears. The maximum and minimum

number of defects are found about the same ages, with a general coincidence from point to point to the curve (shown above) obtained by tracing the number found defective in one or both ears.

In general, of the 6,729 school children between the ages of six and eighteen, tested for aural acuity, 1,080 of this number, i. e., 16 per cent., were found defective in hearing in one or both ears, and are liable to be at a great disadvantage unless the presence of such defects is known in each case. Again, 6¾ per cent. of the total number are found defective in both ears. Further, 9½ per cent. of the total number of children have either the right or left ear defective, and need especially to be cared for and seated on the proper side of the teacher, in order to be able to utilize the unimpaired ear to the best advantage.

Even if one limits oneself to the sense of hearing, one could scarcely advance a more telling argument for the individual care of the children.

This large number of defects will not surprise one when one bears in mind the prevalence of acute catarrhal inflammation of the middle ear which follows in the wake of pharyngitis, or any of the acute infectious diseases. It is a rare parent that has not had experience with the common diseases of measles, scarlatina, whooping cough, pneumonia, and bronchitis. And the cases of tuberculosis, meningitis, and syphilis are by no means uncommon. Further, the presence of adenoid growths, enlarged tonsils, together with nasopharyngeal catarrhs in not a few cases, helps swell the number of after-effects that destroy or mar the delicate mechanism of hearing.

In reviewing these changes of the hearing power thruout school life, one naturally inquires if there is any causal connection between defective hearing and the pupil's ability to advance in the prescribed school courses. This problem presented itself to the department of child study in its investigation of the wider problem of the physical basis of dullness. It is found that the conclusions advanced by Gratsianoff, of Russia, and W. Townsend Porter, formerly of St. Louis, are substantially correct for the limited range of the tests made by them. The dull and backward pupils were not only smaller and lighter than the brighter and more advanced, but the children who are mentally superior on the average showed physical superiority in every test and measurement.*

This does not mean, in the case of hearing, that no child inflicted with dull hearing can be bright enough to be at or above grade, but it does mean that on the average defective hearing hinders the progress of the child in school work.

In investigating this problem of hearing and school standing, the pupils were divided into two groups. Those in or above the proper grade for the respective ages were placed in one group, while those below grade formed the second. The per cent. of pupils subnormal in hearing, in at least one ear, was calculated for each age in both groups.

* See Report No. 2, Department of Child Study and Pedagogic Investigation, Chicago Public Schools.

TABLE II
HEARING AND SCHOOL STANDING

AGE	SCHOOL STANDING	NUMBER TESTED	PUPILS DEFECTIVE IN			
			ONE EAR		BOTH EARS	
			Number	Per Cent.	Number	Per Cent.
8	At and above grade.....	460	101	21.95	36	7.82
	Below grade.....	85	22	25.8	11	12.84
9	At and above grade.....	370	52	14.0	21	5.67
	Below grade.....	185	44	23.7	18	9.73
10	John Worthy School.....	6	3	50.	1	16.66
	At and above grade.....	373	42	11.2	14	3.75
11	Below grade.....	225	46	20.4	24	10.66
	John Worthy School.....	25	6	24.	4	16.00
12	At and above grade.....	317	36	11.03	10	3.15
	Below grade.....	241	52	21.57	29	12.03
13	John Worthy School.....	51	10	19.6	1	1.96
	At and above grade.....	306	33	10.78	9	2.94
14	Below grade.....	302	53	17.55	22	7.02
	John Worthy School.....	99	20	20	6	6.06
15	At and above grade.....	339	46	13.56	14	4.10
	Below grade.....	260	36	13.84	21	8.08
16	John Worthy School.....	114	27	23.6	8	7.01
	At and above grade.....	421	60	14.25	20	4.75
17	Below grade.....	243	43	17.69	18	7.40
	John Worthy School.....	144	49	34.3	16	11.11
18	At and above grade.....	465	70	15.05	27	5.54
	Below grade.....	199	38	19.09	12	6.03
19	John Worthy School.....	111	25	22.5	7	6.30
	At and above grade.....	280	42	15.	23	8.21
20	Below grade.....	275	42	15.27	17	6.19
	John Worthy School.....	37	8	21.6	4	10.81
21	At and above grade.....	190	26	13.68	12	6.32
	Below grade.....	187	30	16.04	17	9.09
22	John Worthy School.....	14	2	14.3	1	7.14
	At and above grade.....	88	13	14.77	4	4.54
23	Below grade.....	104	25	24.04	4	3.81

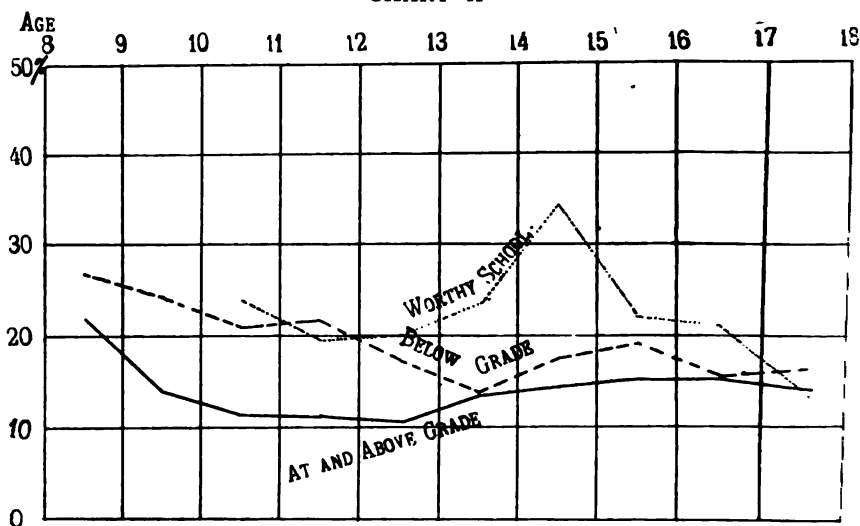
By glancing at Chart II one can trace the relative position of these curves thruout. Before the age of eight years a large majority of the pupils are in the first grade, and there is no below-grade group. In the early years of school life a great many adventitious circumstances other than positive defects may combine to place a child below grade, but in the middle and upper grades of the course the great majority of those marked below grade are there because of inability to secure regular promotion. Now, it will be seen that at every year of school life the children below grade have a larger per cent. of hearing defects than those at or above grade. This relative position of the two curves is maintained thruout the years of school life with surprising uniformity. It seems to draw attention to the symptomatic character of hearing defects; for, besides delimiting the field of sense-impression, defective hearing may be an indication of lack of growth, of improper growth, of injury, or of diseased

condition of the child. This means that defective hearing parallels other defects, sensory, motor, or of growth.¹

This was strikingly evidenced in the examination made by the department of the six hundred boys found in the John Worthy School, a school which is supported by the board of education for the benefit of the juveniles in the city prison. The per cent. of defects by ages of these boys may be seen on the upper curve (Chart II), the seemingly great variability in portions being due to the comparatively small numbers tested. It is rather remarkable that they show a greater number of hearing defects than the so-called normal pupils who are found below grade.

Further, in marking defects of growth and movement, the department of child study has always made note of defects of speech. This is a

CHART II



general term on the examination card of each child, and is used to cover such palpable defects as lisping, stammering, hesitation, and imperfect pronunciation of elementary sounds. The number of those having such speech defects in the John Worthy School was counted. Out of 601 there were 90 pronounced cases of such defects, and of this latter number 56 were markedly subnormal in hearing, i. e., 61 per cent. of those having speech defects were defective in hearing. This may not surprise those who have as their concern the education of mutes, for it is very probable that in many cases the child who is subnormal in hearing is backward in using vocal organs, for the same reason that the deaf child does not exercise the power of speech.

¹ See article by C. C. KRAUSKOPF, "Some Results of Sight Tests of Chicago School Children," *Proceedings of Illinois State Teachers' Association*, 1900-1901.

TABLE III
HEARING AND SPEECH DEFECTS

Age	Number Tested	Number Having Speech Defects	Number Having Speech and Hearing Defects	Per Cent. of Those Defective in Speech who are Subnormal in Hearing
9	6	3	1	33.3
10	25	5	4	80.
11	51	6	5	83.3
12	99	20	11	55.
13	114	13	9	69.2
14	144	17	10	58.8
15	111	19	9	47.4
16	37	4	4	100.
17	14	3	3	100.
Totals	601	90	56	61.11

When one calls to mind the great complexity of mechanism involved in the acquirement and use of the power of speech, and the relatively large area of brain exercised, one can the better understand this inability of the child who is defective in hearing to utilize vocal organs. It is not a matter of the sensori-motor arc becoming atrophied, but of not being developed, so that in this case the proper co-ordination between the hearing area of the brain and those motor areas governing speech has not been set up, nor made flexible and responsive.

I am sure that this Department of Education for the Deaf, Blind, and Feeble-Minded children needs no urging to broaden its interests to take into consideration the well-being of those children who are neither deaf nor blind nor feeble-minded, but who are the so-called normal children, and nevertheless, limiting oneself to the sense of hearing, present the large number of 16 per cent. as subnormal. It means that the children who come under your immediate charge have such pronounced defects that they become at once the objects of individual attention, and the powers and capacities which are available are appealed to, while the children who are subnormal in sensory power are often branded as stupid and wayward because of their apparent inability to keep pace with their more fortunate companions. Facility and ease in sense-perception cannot fail to induce pleasure in further mental activity. On the other hand, the failure to remove difficulty in sensing is poor economy of mental energy.

The department of child study of the public schools of Chicago is interested in every feature of your work. Your problems we appreciate and your achievements we praise. Time forbids any presentation of the immensely important problems before our department further than the facts relative to the sense of hearing, to which I have limited

myself. I can think of no other department of school work than yours that can so readily appreciate the significance of these facts, and I have taken pleasure in presenting them.

THE PUBLIC SCHOOL AS A SOCIAL CENTER

CORA STANTON BROWN, ASSOCIATE EDITOR OF "SCHOOL AND HOME EDUCATION"

The home, the church, and the school reflect and embody the ideals of the race. The two latter are founded upon the idea of fitting man for his destiny. Formerly church and school were divided by a line between the sacred and the secular, which is fast being obliterated, because we are coming to see sacredness in all things. The new education recognizes as its end the development of character, self-realization of a spiritual being of infinite possibilities.

The foundation of church and school is recognized as one. Both institutions take note of economic, industrial, and social conditions. One holds up the ideal life to which man must attain somewhere, some time; the other tries to unfold to the child the actual world and his relation to it. Both deal with race questions, with the child as one of many, recognizing the social whole rather than the individual.

The home is the place where the individual is born and nourished. Its education is egoistic rather than altruistic, its spirit private rather than public, exclusive rather than inclusive.

The public school originated in the limitations of the home. The hardships incident to the settlement of a new country resulted in co-operation between the New England families in the matter of schools and teachers for their children. The state, the first one to recognize the right of *all* men to freedom, has taken these schools under its protection and offers equal opportunity to all its children. The public schools of the United States thus stand upon the highest ideal of man and his destiny yet conceived.

Altho the school was founded on a need in the home, it has become a great institution, and with this growth has crept in formalism in teaching and supervision, until there began to be a separation between the home and the school. Industrial and economic conditions have so changed that the home no longer offers the same educational opportunity it did when many industries were carried on under its roof, and the changes have come so rapidly that we have not wholly adjusted our thinking to the new order. Yet the school still supplements the home, exists for the sake of the individual, and the two need to be in sympathetic and intelligent relation.

My experience is that the school is asking for help, for interest, for knowledge of its ideals and methods from its patrons. Methods have changed since the parents of the present generation were in school. Needs are different. The public school will be a more effective social center, that is, a place where the individual learns to live in the whole, to recognize his responsibility and power in society, when the people for whom it exists hold certain ideals and work for their realization: first, that teaching is a profession and demands professional training; second, that it must be remunerated on the basis of a profession, not of a trade; third, the necessity for culture which comes from a command of one's time and a measure of freedom from petty cares. Only life can produce life. Education is bringing the child into a richer, fuller life than he has known. The teacher cannot share what he does not have.

But the school cannot do the work of regenerating the world alone. I believe the school will reflect the moral and spiritual standards of the families represented there by children as well as the standards of the teachers. The teachers themselves come out of like homes. If the study of their profession gives them higher ideals of life and of man's possibilities, it is their privilege to carry the blessed message back to those who have heard it not.

One element in the effectiveness of the kindergarten is the education of the mother thru her child. Teacher, mother, and child are in close sympathy. One kindergarten has been known to revolutionize a whole neighborhood physically and morally, because one little child has led a whole family into physical and moral cleanliness. In this city (Detroit) the work instigated by one woman has improved a whole school district. I refer to the work of Miss Harriet Marsh and her co-operation with the patrons of her school.

After all, this work of regeneration is an individual matter. The man or woman of great soul makes his or her home, school, church, or social settlement a social center, from which radiate good thought, good will, and good deed.

The best men and women are ready to join hands in work for the children, and the time will come when more cities will join New York in its magnificent public-school extension work for which public-school money is appropriated; when public schools will be endowed as private schools now are; when the power of the only institution in this country where all people really meet on an equal footing, and where the sublime ideals on which our government is based have the best chance of being embodied, will be recognized.

DEPARTMENT OF INDIAN EDUCATION

SECRETARY'S MINUTES

FIRST SESSION.—MONDAY MORNING, JULY 8, 1901

The department met in the Central M. E. Church, Detroit, Mich., at 9:30 o'clock. The session was opened with prayer.

Music—organ solo, "Fugue," *Back*—by Mr. Pomeroy.

Addresses of welcome were delivered by Hon. W. C. Mabury, mayor; Hon. DeLoe Fall, superintendent of public instruction; Wales C. Martindale, city superintendent of schools; and Hon. Ed. F. Marschner, president of board of education of Detroit.

Music—song, "The Violet," *Mildenberg*—by Miss Edyth Lott.

Responses were made by the president of the department, Dr. H. B. Frissell, principal of Hampton Normal and Agricultural Institute; W. M. Beardshear, president of State College of Agriculture and Mechanic Arts, Ames, Ia.; Dr. A. E. Winship, Boston, Mass.; E. C. Nardin, superintendent of Mount Pleasant Indian School; H. B. Peairs, superintendent, Haskell Institute, Kansas; Miss Estelle Reel, superintendent of Indian schools, Washington, D. C.

SECOND SESSION.—MONDAY AFTERNOON

The department was called to order by the president at 2:30 o'clock. After music by the Mount Pleasant Indian Band, President Frissell delivered an address on "Learning by Doing," which was followed by an address by Superintendent N. C. Dougherty, city schools, Peoria, Ill.

The remaining exercises were as follows:

1. "What Constitutes Eligibility for Enrollment in a Government School?" Discussion led by Superintendent H. B. Peairs, Haskell Institute, Lawrence, Kan.
2. "How Can We Secure the Systematic Transfer of Pupils from Day to Reservation Schools and from Reservation to Non-Reservation Schools?" Discussion led by Superintendent J. C. Hart, Indian School, Onelda, Wis.
3. "The Essentials of Indian Education." Superintendent T. G. Lemmon, Indian School, Grand Junction, Colo.
4. "Better Facilities for Industrial Training and Competent Teachers Needed." Discussion led by Superintendent DeWitt Harris, Pipestone, Minn.
5. "The Advisability of More All-Around Training for the Indian, Rather than an Attempt to Make of Him a Skilled Mechanic," Professor Frank K. Rogers, Hampton Institute, Va.
6. Physicians' Conference; leader, Dr. J. G. Bulloch, Indian School, Cherokee, N. C.

THIRD SESSION.—TUESDAY MORNING, JULY 9

The session was opened with prayer, at 9:30 o'clock.

Music—organ solo, "Sonata in G," *Dudley Buck*—by Mr. Pomeroy.

President Frissell announced the following program:

1. Opening address, Dr. A. E. Winship, editor of the *Journal of Education*, Boston, Mass.
2. Address, Hon. H. C. Smith, M.C., Adrian, Mich.
3. "The Need of Compulsory Education." Discussion led by Superintendent H. B. Peairs, Haskell Institute, Kansas; Superintendent George W. Nellis, Sac and Fox, Ia.; and Superintendent E. C. Nardin, Indian School, Mount Pleasant, Mich.

4. Paper, "Introspection," Superintendent E. A. Allen, Seneca Indian School, Wyandotte, I. T. Music—vocal solo, "Like as the Heart Desireth"—by Miss Edyth Lott.
5. "Resolved, That the reservation day school should be made the prime factor in Indian education." Discussion led by Agent F. O. Getchell, Fort Totten Agency, N. D.; C. C. Covey, teacher, Indian School, Pine Ridge, S. D.; E. C. Scovel, teacher, Cass Lake Boarding School, Minnesota.
6. "Resolved, That children should at least be able to read, write, and speak the English language before being placed in a non-reservation school." Discussion led by Superintendent Charles F. Pierce, Flandreau Indian School, South Dakota.
7. Paper, "What to Do in the Night School," Miss Augusta Hultman, superintendent Grace Indian School, South Dakota.

FOURTH SESSION.—WEDNESDAY MORNING, JULY 10

The session was opened by President Frissell at 9:30 o'clock.

Music—cornet solo, "The Dreams," *Stelensk*—by Dr. C. E. Burt.

The following was the program of the session:

1. Opening address, "What Should be Taught in Indian Schools?" Professor C. M. Woodward, director St. Louis Manual Training School, Washington University, St. Louis, Mo.
2. "The Necessity of Teaching the Boy to Improve the Allotment the Government Has Given Him." Discussion led by Superintendent F. F. Avery, Fort Spokane, Wash., and Superintendent Russell Ratliff, Omaha and Winnebago Agency, Nebraska.
3. Paper, "Teaching the Indian Girl to Make Her Own Clothes," Mrs. Adaline O'Brien Evans, teacher, Indian School, Chilocco, Okla.
4. "What System Will Best Promote Character-Building Among the Indian Pupils and the Courage and Ability to Enter and Contend in the Opportunities of Civilized Life?" Miss Cora M. Folsom, Hampton Institute, Virginia.
5. "How Can We Secure a Better Unification of Industrial and Academic Features in Indian Schools?" Discussion led by Professor O. H. Bakeless, Indian School, Carlisle, Pa.
6. "The Indian Employee: What Are His Needs and the Best Means of Stimulating His Growth and Self-Improvement?" Discussion led by Superintendent C. J. Crandall, Indian School, Santa Fé, N. M.

FIFTH SESSION.—THURSDAY AFTERNOON, JULY 11

The session was opened at 2:30 o'clock, President Frissell in the chair.

Music, Mount Pleasant Indian Band.

The following program was announced:

1. Opening address, "Civilization and Higher Education," Hon. William T. Harris, United States Commissioner of Education, Washington, D. C.
2. "The Necessity for a Large Agricultural School in the Indian Service." Discussion led by Superintendent C. W. Goodman, Chilocco Indian School, Oklahoma.
3. "Practical Methods in Indian Education." Discussion led by Superintendent S. M. McCowan, Phoenix, Ariz., and Mr. Joseph L. Evans, teacher in Indian School, Chilocco, Okla.
4. "The Day School as the Gradual Uplifter of the Tribe," Sister Macaria Murphy, Odanah Day School, La Pointe Agency, Wisconsin.
5. "The Slow but Lasting Results Obtained from Practical Teaching at Day Schools," Mr. M. M. Murphy, Kingman Day School, Arizona.
6. "The Future of the Pueblo," Miss Mary E. Disette, supervising teacher, day schools, Santa Fé, N. M.
7. "How Many Years Can Profitably be Spent at a Day School?" Discussion led by Superintendent Reuben Perry, Lac du Flambeau School, Wisconsin.
8. Closing addresses: Superintendent H. B. Peairs, Haskell Institute, Kansas; Superintendent S. M. McCowan, Phoenix Indian School, Arizona; Superintendent J. C. Hart, Oneida Indian School, Wisconsin; Dr. H. B. Frissell, principal of Hampton Institute, Virginia; Superintendent E. A. Allen, Seneca Indian School, Wyandotte, I. T.; Miss Estelle Reel, superintendent of Indian Schools, Washington, D. C.

The department then elected the following as officers for the ensuing year:

President—Samuel M. McCowan, Phoenix, N. M.

Vice-President—H. B. Frissell, Hampton, Va.

Secretary—Miss Estelle Reel, Washington, D. C.

The department then adjourned.

F. F. AVERY, *Secretary*.

REPORT OF ROUND TABLE

The section of matrons and teachers of domestic science met in the reading-room of the M. E. Church, July 9, 10:30 A. M., with a good attendance.

Mrs. Blanchard, of Crow Creek Agency, S. D., who was appointed chairman of the section, called the meeting to order.

Mary Holsinger, of Fort Sill, Okla., was appointed secretary.

The chair called upon those present for questions that they wished considered, and a lively discussion followed, in which all took part. The crowded sleeping rooms of many of the reservation schools were discussed. Plans for their improvement and methods of procedure to obtain more room were proposed. Reports showed need of more room in many cases. Mrs. Nardin, of Mount Pleasant, Mich.; Mrs. Peaks, of Riverside, Okla.; and Mrs. Peticolas, of Green Bay, led the discussion, which afterward became general. The drift of the discussion was to the effect that employees and superintendents should persistently ask for more room, where it is so greatly needed, until it is supplied.

Changes of clothing, clothing-rooms, wardrobes, or improvised substitutes were discussed by Mrs. Kennedy, of Blackfoot, S. D., Mrs. Blanchard, of Crow Creek, S. D., and others. It was shown that nooks in hallways, corners or offsets in rooms wherever possible, could by the use of curtains, boxes, nails, etc., be used to afford individual compartments for clothing or other personal belongings.

Mrs. Ward, of Tomah, Wis., Mrs. Canfield, of Carlisle, Pa., and others advised that both boys and girls attend to the repairs of their clothing requiring immediate attention, such as sewing on buttons, mending a ripped seam, etc., but that all other mending be done in the sewing-room under the supervision of the seamstress or her assistant.

It was thought best that all the girls should be detailed to the various departments, and that they should be so divided that every department should have girls of all ages. In this way the efficient help is most evenly divided, while young girls are learning to do the work of the departments.

The chair advised an exchange of addresses on the part of those who might wish to discuss fully and privately any subject bearing upon their work.

The section adjourned to meet at the call of Miss Estelle Reel, the national superintendent of Indian schools.

A second meeting was held July 11. Some time was spent in continuation of the discussion of the subjects that had occupied the attention of the section at the previous meeting.

The value of girls learning to cut, fit, and make garments was a subject for general discussion.

The plan of giving every girl who can sew cloth for a dress to be made by her for wear during vacation was recommended. In schools where this has been tried good results followed.

Discussion of social entertainments followed. At one school weekly socials are held for all who have a good record during the week, the amusements mentioned being games and dancing. Tea and other refreshments are served at some schools by girls who have prepared the food on a small cooking stove; but at all of these socials employees are present to teach the children social etiquette and direct them in their games.

Decoration of playrooms and dormitories was advised, the use of cards, magazine pictures, and advertisements being suggested, the children always assisting in the work.

Evening school, evening hour, close of the day, devotional exercises, and retiring hour were generally discussed, and the need of more moral and religious instruction was noted. It was thought desirable that the evening school should add much of cheer and happiness to the children's life at school, if care be taken that it afford a suitable change from the work of the day in the schoolroom. The section adjourned subject to call.

MARY HOLSINGER, *Secretary*.

PAPERS AND DISCUSSIONS^{*}

PRESIDENT'S ADDRESS—LEARNING BY DOING

H. B. FRISSELL, PRINCIPAL OF HAMPTON NORMAL AND AGRICULTURAL INSTITUTE, HAMPTON, VA

[AN ABSTRACT]

In an educational gathering, not long since, very high praise was bestowed upon the Indian schools. The system of education which has been adopted in the Indian schools is one that is commanding the respect and confidence of all who are interested in education. I need not explain to you that it is a system which gives more prominence to the production of self-supporting citizens than to the making of scholars.

This thought of training the youths to do their part in the great world, in society, and in the family is one that ought to enter into all our work. The school ought to be a miniature community. It is because this has been to some extent accomplished in our Indian schools that they are in many respects superior to the common schools of the country. There are certain definite things which we are trying to bring about by our peculiar system. The first, and perhaps the most important, is the formation of a habit of work. The first and most important lesson, then, and the one without which all other lessons will be of little value, is the necessity and dignity of labor.

It is, then, of vital importance that our educational system lay stress on the active side of education, that the work of the hands be given special prominence. In some of our schools, from the time the children enter the kindergarten, an endeavor is made to cultivate a love for the regular occupations of life. On Monday the washtub is introduced, and on Tuesday the ironing board. The little children are taught to find pleasure in work. From their earliest days their constructive powers are trained and they learn to do. Dolls' houses are built, small pieces of furniture are made, rugs and carpets woven. Each child has regular duties

^{*} The following papers and discussions have been selected for publication by Miss Estelle Reel, the superintendent of Indian schools of the Department of the Interior, Washington, D. C. Most of the papers are necessarily published in abstract because of the limits of available space.

of his own. When the spring time comes, the little kindergartners, as well as the older pupils, are sent into the garden for the purpose of cultivating the soil. Two children tend a plot together. While they thus learn to work with one another, there is developed at the same time a sense of individual proprietorship in land. How important the creation of the work habit is we hardly appreciate. We hardly realize how large a factor in the preservation of order among these people is this same habit of work.

Learning by doing gives an opportunity to teach Indian youths to care for the things about them. We must teach the Indians how to create around them objects of interest. The Indian has a real love for his home. So far as possible, therefore, this love should be used as an incentive to the improvement of the family and community. Every Indian boy ought to gain sufficient knowledge of carpentry at school to be able to put up a plain house. In some of our Indian schools the girls are taught to make simple pieces of furniture, to weave rugs, and to make mattresses. They are encouraged to make ornamental and useful things for their rooms; there is thus created at the same time a love for beautiful objects and the power to produce them. These girls are also taught how to raise chickens and care for other domestic animals, as well as how to work their own plots of land; and they have even been sent out to study and criticise the farms and homes of the community about them. In some cases they have attempted the reconstruction of the gardens and yards belonging to old and infirm people, clearing out the rubbish, planting seeds and vines, making plans for improved conditions, and then carrying them out.

There is an increasing endeavor on the part of the heads of our Indian schools to study the conditions from which the students come and to which they must return, and to adapt their work and study while in school to their needs at home. On one of our western reservations a creamery has been started during the past year. As there is good grazing land on this reservation and an excellent market for butter and cream, there is reason to believe that, if well managed, this creamery will succeed. This industry will not only provide the Indians with a regular income, but will give them training in the care of cows and in methods of fertilizing land. In order to co-operate with this movement the principal of the school in which some of the boys from this reservation were pupils advised them to study dairying. From their summer earnings they had laid up sufficient money to buy cows for themselves, and when they return they will be in a position to help carry on that creamery. It is very much to be hoped that the number of industries on the reservation may be so increased that opportunities for earning a living may be provided for all students on their return from school. If, instead of spending hundreds of thousands of dollars for the purchase of supplies outside

the reservation, factories should be established where the industrial training of the young people might be continued, great good would be accomplished. Native industries should also be revived and encouraged, and business bureaus established for the sale of native products.

The Indian youth must be instructed in citizenship. Whatever there was of good in the old tribal system—and there was much—has for the most part been done away with by the reservation period. Unfortunately, the issuing of rations has largely pauperized the Indian, and any system devised for his education must take into account the serious defects of character which are the natural result of depending upon the government for daily bread. It is not easy to develop in an Indian youth a sense of responsibility. It is quite natural that after years of government paternal care, for which he was obliged to make no return, he should not take readily to caring for himself. No such system, then, as prevails in our public schools would meet the requirements of these young people. An Indian boarding school ought to be as largely as possible an industrial village community, with its farms, stores, dwellings, churches, workshops, and schoolrooms, where the Indian youth is introduced into real life. Each student should be assigned some definite duty, for the doing of which he should be held responsible. The thought of co-operation in work and study should also be developed. If an Indian is to become an American citizen, all his faculties must be carefully trained. To bring this about the school must be a small world where the youth will find himself in close proximity to nature and to life.

The Indian gains, while in school, the Christian thought of service and mutual helpfulness. In order that this may be accomplished there must be an atmosphere of co-operation among both students and teachers. There is no place where bickerings and jealousies are more out of place than in an Indian school, where representatives of the white race are endeavoring to show the members of a child-race how to live a civilized Christian life.

In some of our institutions not only are the young people made to feel that their religion is a part of their everyday life, but they are interested in work for the poor and sick, and to give of their time and thought to make life easier for the old people in the poorhouse and in the cabins. The pauperizing, hardening influences of the reservation which cause the Indian to be thoroly self-centered can be overcome only as they are thoroly imbued with the Christian idea of service for others. This sort of Christianity can be learned only by doing.

Closely connected with the idea of serving is that of saving. It is doubtful if rapid progress can be made toward civilization on the part of the Indian youth without it. The thought of having all things in common must be overcome, and the Indian taught that in order to serve effectually he must save. In a number of our Indian schools savings

banks and provident funds have been established, and with the enlargement of the outing system the yearly earnings of our Indian pupils become quite considerable. It is of vital importance that these funds which are usually held by the school authorities, should be expended, at the return of the students to their homes, in such a way as to give them a real start in business or on their farms. The old Indian custom, which makes it necessary for an Indian boy to share whatever he has earned with the whole tribe in a feast or a frolic, must be given up, or there will be little progress.

I have endeavored to give a brief outline of the plan of work that has been adopted in our Indian schools. While much remains to be done, I consider that an excellent start has been made and a real interest has been created in the subject of education, not only among the Indian youths, but among their parents.

CIVILIZATION AND HIGHER EDUCATION

WILLIAM T. HARRIS, UNITED STATES COMMISSIONER OF EDUCATION,
WASHINGTON, D. C.

There are two methods of teaching other races than our own. One method is to take advantage of them, to use them selfishly for our advantage and against their own interest; in short, to exterminate them or convert them into bond slaves. The other method is to take them and put them in such training that they can participate in our civilization and learn to do what we are doing — namely, to conquer nature by science and art.

If we come in contact with other races than our own thru our worst elements, thru our adventurers, we are likely to put into effect the first method named. If we come in contact with those races thru the agencies of our government, we are more likely to adopt the second method; for it may be said to be the policy of our government to provide schools for the dependent races which come to us in newly acquired territory. In those schools we endeavor to teach the children letters and science — letters which make intercommunication possible and which open to all who possess them an acquaintance with the literature of our English-speaking races — a literature which has revealed thru its poets and prose writers the lofty aspirations and the hunger for individual freedom which our race thruout its history has possessed. We impart in our literature also our views of the world revealed in the religion of the divine-human God, a heavenly Father in whose eyes all races of men are brethren. For the highest expression of our world-view is found in the words of the evangel: "Glory to God in the highest, and on the earth peace and good will to man."

It is important for the teachers of the children of a people who are in the tribal relation, or who are making progress out of the tribal relation into a condition of productive industry and representative government, to ask themselves what is civilization. They should ask this question often, and keep its answer in view as a kind of pole star by which to direct their course. I have often heard it said among amateur students of ethnology that the white man's civilization is no better than the red man's civilization or the yellow man's civilization. A teacher of Indian youth who sincerely believed the truth of these assertions would naturally feel compunctions in carrying out the program of his day's work.

Let us attempt to define civilization by saying that in proportion to its degree the higher civilization shows its advantage over the lower civilization by producing a higher order of individualism and the greater distribution of local self-government, and at the same time a greater participation of the masses of the people in the products of the industry of its own community, and of all communities in the world, by means of commerce; and, more than this, a participation in the intellectual and spiritual products of all mankind.

Measured by this standard, it will be seen how small is the realization which a tribal community has of the benefits of civilization. For the tribe consists of a small number of people mostly connected by family ties and governed by autocratic authority of the chief and his council. The tribe has kept a jealous watch upon its frontier, lest some or all of the neighboring tribes approach it with hostile intent. The tribe has to give a narrow education in hunting and war to its people, and teach them the mythical traditions which furnish a sort of superstitious explanation of its manners and customs, and of the phenomena of nature in its vicinity. It must be a principle of the tribe to shut out communication with its neighbors. All of its people are educated into distrust of the people of neighboring tribes. Under these conditions the knowledge of the tribal races of mankind can amount to but little. And the concentration of all the nervous energy of the tribe upon defense and the procurement of subsistence renders literature, science, and art next to impossible.

Not only does tribal life prevent intercourse with the present and past history of the human race, but it prevents that division of labor which makes possible any high degree of productivity in the industries. Its agriculture and manufactures are conducted by the women and superannuated men—the young warrior despises an industrial occupation.

Now, if we count the value of the industry of the tribe in ordinary conditions, we shall find that its money value is something less than three cents a day apiece for each man, woman, and child, while that of the highest civilization amounts to nearly twenty times that amount—say from ten times that amount in the nations of the extreme north or extreme south of Europe to twenty times that amount in the industrial

centers of England and Scotland. Moreover, in the centers of civilization all persons participate in the world-market, and have more or less knowledge of all the peoples of the world, and are constantly learning regarding their doings, whether in the realm of material production or in the realm of spiritual production. The most highly civilized people, in fact, commence each day of their lives by a survey more or less hasty, but quite effective, of the doings of nations as collected by telegraph and spread out before them in the morning newspaper. I can compare this survey of the entire world in its effects on the human disposition only to a daily religious ceremony. For it presupposes a peaceable and co-operative relation of all peoples to one another thruout the world, all being engaged for the most part in the one great business of conquering nature and turning its products to human uses, and the making of all observation and reflection of mankind accessible to each individual citizen of the world.

The teacher of the youth of a tribal people will believe in the potency of the highest civilization and try to lead his pupils, first, to learn the arts of intercommunication, reading, and writing; secondly, to master the arts and sciences which make him acquainted with his fellow-men near and far off, such as geography and history; and, thirdly, to form an acquaintance with those tools of thought by the aid of which man has conquered nature: branches of mathematics, physics and chemistry, geology and astronomy, and the sciences that relate to living beings such as plants and animals. The civilized arts of life will not be neglected.

Each question that comes up regarding the course of study and discipline or moral education will be referred for answer to the principle of civilization: Does this branch aid the Indian child in acquiring a knowledge of the human race and the purposes of the several instruments of civilization? Does each discipline help him participate in the industrial civilization to which he belongs? If not, the branch of study or the discipline has no place in the program. If yes, then it ought to be introduced, but not to the exclusion of something having a greater claim based on the same principle.

We teach the children of Indian tribes or of Malay tribes certain elementary branches which we teach in the elementary schools of our country to the children of our citizens. The significance of these branches of the common course of study does not always occur to us with its full force when we hear those branches named in a bare series, as reading, writing, arithmetic, geography, and history. It is only when we state to ourselves the significance of these branches one after another that we see what instruments of power are placed in the hand of the pupil by their acquirement. Let the child learn to read and write. This is of little importance unless he uses the arts of reading and writing; if

he does not use them, he depends thruout his life upon his own narrow experience limited by time and space, and upon such scraps of information which he may overhear in the conversation of his fellow-men about him ; but if he uses constantly these arts, he from time to time reinforces his own narrow experience by the wide experience of his race coming to him after much sifting in the daily newspaper ; coming to him after as much more sifting in the pages of the magazine and popular book ; coming to him with a third and much more sifting in the pages of the scientific book and the book of literature, of history — books which belong to what is called standard literature and science. Again, looking upon the common-school branch of arithmetic : It begins with counting and producing, thru various processes of abridging, numerical calculations up to the vestibule of the higher and more wonderful arts of mathematics, namely, geometry, algebra, trigonometry, and other arts of measurement based on a knowledge of the triangle and the calculus of variations. Arithmetic opens the door to all these things—to a knowledge of the laws of matter and motion in time and space. The savage who can count only up to five or ten, and who has no knowledge of the decimal system of numeration nor of the arts of calculation, has very little power to combine matter and motion and to make the forces of nature serve him.

Then from his geography he studies the relation of one's habitat to the rest of the world ; learning the lesson of commerce, the exchange of what one's habitat produces, what is useful to the rest of mankind, for the products of all places on the globe inhabited by men. Geography shows us the spectacle of the individual supplementing himself and his feeble endeavors and the scanty list of his home productions by means of the world-market produced by commerce. This is a process of converting the individual into a giant by reinforcing him thru the labor of mankind.

Then there is history in the common school which reveals the nature, not of particular individuals so much as of the races of men. History shows the permanent characteristics ; shows the margin of variation from the lowest degree to the highest degree of manifestation of power and enterprise ; of human passions and violence in action. It gives to each individual a perspective showing himself, not a mere individual, but as a social whole ; vast combinations of men united into nations and manifesting certain purposes and producing necessary or unnecessary collisions one with another. History is the revelation of the will-power of mankind.

In our common schools, even in those offered to the savage tribes who come within the control of our national government, we offer these important branches of general culture. All of them tend to the emancipation of the individual ; all of them tend to give him power to combine on rational terms with his fellow-men.

**THE RESERVATION DAY SCHOOL SHOULD BE THE
PRIME FACTOR IN INDIAN EDUCATION**

C. C. COVEY, TEACHER, PINE RIDGE INDIAN SCHOOL, S. D

[AN ABSTRACT]

The aim in Indian education is twofold : to elevate the Indian in character, and to enable him to live in and cope with advanced civilization. "The common schools are the hope of our country," whether the inhabitants of that country be white or red. The purpose of all education is to strengthen the institutional life of the community. The Indian has a stronger regard for his home than for any other institution ; then why not pursue a pedagogical course, take advantage of this little beginning, and implant around it the other elements that will make the pupil a useful citizen ?

This is the work of the day school : to go into the savage camp ; to further the child's love for his home and the parent's love for the child ; to improve that home as well as all its occupants. Insignificant as this work may seem, the Indian cannot see the teacher and his family go about their work in a regular way, keeping themselves and their house in order, cultivating their little garden, milking their cows, and doing a thousand things in regular order and on time, without himself absorbing some of their regularity. He himself must rise and prepare his meals at a certain time, that his child may not be late at school. He must have a fixed habitation for at least ten months in the year. All this will eventually cause him to form more regular habits of living and give him some conception of the value of time, counteract some of his laziness, and start him on the road to civilization. The day-school home is to the Indian camp what a model farm is to an agricultural community in the midst of which it may be placed. If properly conducted, it incites the Indian to emulate the example constantly set before him. But the greatest influence is on the young ; the child is taught the English language ; his education is begun ; he is made to work, to keep clean ; until finally, when he is ready to go to a higher school, he does these things from a force of habit or from a realization of their value.

In the preparation of this paper I have consulted over thirty men who have had years of experience in the Indian-school service. They have all held positions in both boarding and day schools. Some are now superintendents of boarding schools. When asked if they would affirm or deny this proposition : "*Resolved*, That the reservation day school should be made the prime factor in Indian education," all but two affirmed.

Some of the arguments given in support of the continuance of the day school were : As early impressions are lasting, one need not lead the

child to believe that all the teachings and practices of his parents are wrong. Since the parent has so much influence over the child, we must reach the home, and this can best be done thru the day school; it is the only school that is doing effective work in carrying civilization to the Indian home. The change in the child's condition is so gradual that, when the parent sees it every day, there is no desire to nullify the whole effect of the education received, but rather a desire to help the teacher in his work. The day school comes nearer the home and heart of an Indian than any boarding school can; he sees his children go to school every morning, dirty perhaps, but when they return of an evening they are neat and clean—this must exert a great influence for good at home.

Some of the hindrances to effective work mentioned as incident to the day school were: lack of equipment; insufficient buildings; the meager compensation of the patient housekeeper; coolness on the part of government officials; and the language, customs, and dress of the Indians.

In answer to the question, "Which is the most effective, considering the cost, the day, boarding, or non-reservation school?" all but three favored the day school. Some favored it, even tho its cost were doubled, and others restricted its effectiveness to children under twelve. One reply said: "Admitted that the boarding school will send home pupils who will for a short time speak better English, have a neater appearance, and know more about books than the day-school pupils; admitted that the non-reservation school will send home polished and perhaps refined students, we who have come in contact with the returned students know that nine-tenths of them are idle because the education the government has given them cannot be applied to anything they find to do on the reservation. They were taught to wash by steam at school, but they find no steam washers or steam wringers at home."

Finally, then, we will say that the more we investigate, the more we are convinced that the day school is the school best adapted to the needs of the Indian. The non-reservation school may fit him to compete with the white man; but if he will not do this, if he will not stay in the East, we must improve him where we find him and fit him for life in his own home.

Our field matrons, and nearly all officials who have had the opportunity to investigate, are awakening to the fact that the day school is the coming school. Let the children be taught in the day school till twelve or fourteen years of age; then let those who are capable be sent to the boarding school and from there promoted to the non-reservation school. There is no occasion for jealousy or friction; there is work for all; but let each do its own work and not try to usurp the place of the other; and after a while, when that happy time shall come when reservation lines are no more and the Indians become citizens of their respective states, they will have an ample school system ready to turn over to their own local government.

THE UNIFICATION OF INDUSTRIAL AND ACADEMIC FEATURES OF THE INDIAN SCHOOLS

PROFESSOR O. H. BAKELESS, INDIAN SCHOOL, CARLISLE, PA.

[AN ABSTRACT]

The Indian school designed to lift in a single generation a people from the middle and lower stages of barbarism into civilization and citizenship is planned along the broad lines of "sending the whole child to school." The old school had use only for the intellect.

We must get rid of the theoretical flavor of the schoolroom and the peculiar tendency on the part of the teacher to want all bright pupils to prepare for the so-called "professions."

Natural inclination and gifts, and not a teacher's preferences, should shape a pupil's life-aims.

On the part of the shop we want less prejudice against theory and the processes of the schoolroom, and a willingness to grow. Knowledge and skill in the same man always make for power.

The hold of the school will be more vital and prolonged because it has recognized the power of the shop as a preparation for life.

Ideal industrial schools ought to do systematically, in an intelligent and competent way, what the home, the shop, the factory, and the farm do disconnectedly in a comparatively meager and haphazard way.

Perhaps the greatest waste in our schoolrooms today is that resulting from not leading the children to utilize the experience they get out of school. Teachers do not know the experiences of their pupils; do not try to explore this domain. Facts often taught are irrelevant ones; forgotten as soon as learned, or valueless if retained.

It is a weakness in the system that an industrial instructor is tacitly ranked below the academic teacher.

The teachers of the academic subjects should be constantly reaching out to the industrial and into the larger life of the world; thus becoming more practical, more original, and less dependent on books.

The instructor in the shop, from the side of the process of work, should reach up to the theoretical, to the scientific principles involved in his work.

All artisans in charge of industries, as instructors in and teachers of their craft, should be students, advancing in intelligence, in skill in their departments, and in their power to help and uplift the children under their guidance. Frequently the morals and habits of such employees are not above reproach. Only *clean* men, who are enthusiastic and eager to grow, should be retained in the service.

Visits to progressive institutions and a study of their work and methods will do much toward keeping this spirit of progress and growth alive.

A union meeting of all teachers and instructors once a month, under an efficient presiding officer, to discuss the general features of the work, compare notes, consider subjects of education, of discipline, and other vital questions relating to the work, would do much toward unifying the two phases of the work under discussion.

It would bring all the employees into a sympathetic appreciation of the difficulties met in the various departments. It would stimulate healthy growth on every side.

The teachers in the schoolrooms can often get their best material for class work in the shop, and thus draw closer and more sympathetically to it. Conditions arising in the shops, the sewing-room, the kitchen, and on the farm will furnish material for right teaching of arithmetic. The most practical suggestion this year for arithmetic work came from a ten-minute talk with the carpenter. The class that does not get many of its data in this practical way for this subject is wasting time.

Language teaching can in every way be strengthened by gathering material for it from the shop, or the places of work; and both school and shop will be helped by the process.

The implements and processes of the industries will furnish an unlimited amount of material for essays and oral exercises; all, too, coming within the knowledge-domain of the pupil.

The director of our printing-office has prepared a series of talks on the craft of printing and its history. These are given to her classes. Many questions and topics follow for discussion, and later are carefully worked out by each pupil in a series of essays.

The printing-office is thus made the point of vantage from which the pupil can trace and follow the progress of civilized man in this craft, getting an insight into the material used and the mechanical principles involved—practical exercises full of vitality and mental stimulus. What hinders a similar plan being followed in other industries?

Physics, chemistry, and many other subjects of learning are helped by the teacher's intimate knowledge of the shop. Every fact gathered in this way will remain a permanent possession of the pupil.

Nature study will get its most helpful material from the farm and the farmer. These men are wise in their own way, and we pedagogs should learn that neither wisdom nor knowledge will ever die with the mere schoolman.

Where pupils and teachers live close to the farm and the garden, and in friendly companionship with the farmer, nature study becomes a real thing and not a fiction. Nature study of the kind that makes the pupil love the woods and the fields is what we strive for. No study of nature can give young people that appreciation for her gotten by working with her and living a simple life surrounded by her, as is so beautifully shown by the honored president of Tuskegee in a recent article in the *Outlook*.

No object-lesson gotten up as an object-lesson for the sake of giving information can afford even the shadow of a substitute for acquaintance with plants and animals of the farm and garden acquired thru actual living among them and caring for them.

No attempt at training of the senses in the school can compare with the alertness and fullness of sense-life that come from daily intimacy with familiar occupations, working with a purpose, under a thoughtful, skilled man as an instructor.

We want thus to meet often and intimately workers in other fields, with minds open to receive the best they have to give. We want to project ourselves into their lives, appreciate their difficulties, and thus grow into sympathy with them, as we profit by the best they can give.

Talks and lectures by the heads of the departments on the interdependence of the various subjects of studies and industries would do much toward helping all to see the educational content and value of each.

Down with the old notion that some callings are more respectable than others! Profound respect for labor must be formed.

One of the most stimulating sights to me a few months ago was that of a bright, intelligent young man, an Indian with shop training, a most forceful teacher, who won the esteem and affection of his pupils by his earnest work, dropping his teaching for a week to lead a group of boys in some necessary repair work. With sleeves rolled up in the van of the work he led, working with the crowd of workers, and never a moment of self-consciousness, because his mind was intent upon having the work well done; this, when a skilled mechanic failed to get results because he could not lead. Such power over men and material, such a personality, would do more toward unifying and intensifying the work of an industrial school than any other influence I can think of.

The Indian child must bring his whole mind, his whole body, to the school and the shop as one institution; and we as teachers must see that he takes away a well-stored, well-developed mind, and a healthy body, well trained to take up the duty of self-support.

The government industrial school has been in vain if it fails to do this for Indian youths.

WHAT SHALL BE TAUGHT IN AN INDIAN SCHOOL?

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OF WASHINGTON UNIVERSITY, ST. LOUIS, MO.

[AN ABSTRACT]

Never was Spencer's early question more timely than just now, as we face the practical problem of Indian education: "What knowledge is of most worth?"

You remember that Spencer insists, in his reply to his own question, that education must first be directed to developing the power of providing *food, clothing, and shelter* for one's self and one's family. Self-support is the corner-stone of all good citizenship. Without this there can be no good citizen, no sound basis for society, no reasonable hope for civilization and culture.

I was told last week by the educated young Indian in charge of the government exhibit of Indian schools at Buffalo that the purpose of the Carlisle school was to train individuals for lives of practical usefulness, not among their own people on the reservations, but in American industrial and commercial life. Of course, this object is often defeated, and the graduate drifts back to his early home, and when there he frequently lapses into a life of idleness and hopeless discontent. Doubtless such cases have a faint influence on Indian civilization, but the chief fruit is individual. The number of the nation's wards is diminished by the number of people who thus desert their parents and early surroundings, but the problem of the education of the race to a better and higher civilization is left *in statu quo*. I am not sure but this depopulation leaves the tribe worse off than ever. The loss of the brightest and most promising minds must degrade the remnant.

In the case of schools on the reservations, the aim is, I suppose, quite different, but in so far as they prepare the children for lives of usefulness outside the Indian community, the effect must be bad on those that remain. The ultimate success of a scheme of educating Indian children away from all the tribes and traditions of their ancestors involves the complete depopulation and final extinction of the tribes. I do not assume that this plan has been definitely adopted nor that it ever will be, but, if it should be, it should be carried out relentlessly; every child should be withdrawn, and none should ever be allowed to go back. The government can then maintain the forlorn and useless adults in luxurious idleness and depravity until old age and disease wipe them out of existence forever. Such is the logical outcome of the scheme of government support and individual education away from the tribes. I cannot condemn this course too strongly. The Indian tribes will never amount to anything so long as they are supported in idleness while their children are educated elsewhere. No progress toward a better civilization, including self-support, is possible under such conditions.

The policy of generous allotments of land on which the Indians must support themselves must ultimately become general. This should include a system of Indian education carefully devised to deal with Indian civilization as it now exists, and gradually to raise it to the plane of respectable American citizenship. In other words, we should deal with the Indians just as we are going to deal with the people of Porto Rico and the Philippine Islands.

In the first place, the school and all it contains must be within the circle of Indian sympathies. The training must be of such a simple and practical character as to win the approval of the Indian people. Hence it must not run violently against their traditions, and it must keep in view the peculiar environment of the future lives of the children. In my judgment the course of study, text-books, and manual features of the schools of Boston or Detroit are out of place in an Indian community. Of course, the children should learn to read, write, and speak the English language, and they should learn to translate household English into the vernacular of their homes, so as to help bridge over the gulf between our civilization and theirs. They should learn the fundamental operations of arithmetic, the tables of weights and measures (I mean avoirdupois weight, the bushels by weight, the wine gallon, and the English measures of length, surface, and volume); but avoid the confusion which results from the introduction of other tables. These should be learned practically until every child has a trained judgment and a personal consciousness of a pound and ten pounds; of a foot and one hundred feet; of an acre and ten acres; a quart, two gallons, etc. They should know how to keep simple accounts and how to make out bills. The nature, meaning, and use of fractions should be made clear by abundant practical examples. Mental arithmetic with clear oral analysis is invaluable. For the common initial school, mathematical study should stop there. The puzzles of banking, exchange, proportion, etc., and the subjects of algebra and geometry, are too remote and out of the present reach of Indian sympathy, and should be omitted.

Geography should be largely local. I doubt if at first it should go much beyond the United States. Above all, the geography should be an Indian geography, specially prepared for Indian schools, giving all possible information in regard to Indian tribes, their location, their extent, their improvements, their growth and history. This combined history and geography should furnish reading lessons, should stimulate pride and ambition, and should enhance the value of social and public improvements. Neither the teacher nor the publisher should ever forget that the children are Indians, that they go home to Indian parents at night or every few weeks, and that they report at home continually what they learn at school. Thus the Indian children are to become the teachers and inspirers of their parents. In this way the whole community should be reached.

It is not greatly so in your community and mine. Our children learn more at home than they do at school. We supplement their school teaching by books and constant instruction. In the Indian house or cabin the ignorant mother and father will sit at the feet of their own child, and we must keep their intellectual and social status continually in our minds.

When it comes to the reading-books, they, too, should be written for the Indian schools, by people who are thoroly familiar with Indian history and biography, and above all with the traditions which are handed down from father to son, and which white men rarely hear.

I am well aware that some of you will not agree with me here. You are disposed to think that the children should know as little as possible of the Indian history, and that they should cherish no Indian heroes. Such a course I cannot approve. Can you secure a feeling of self-respect and self-reliance by giving the Indian boy to understand that you have no respect for his father or grandfather? that you regard them as worthless and too degraded to be worthy of recognition? Does the commandment, "Honor thy father and thy mother," not apply to Indians? Can you expect to cultivate a spirit of loyalty, reverence, and chivalry in the hearts of Indian youths who are taught to forget and despise their ancestors? There is plenty of good literature touching the finer characteristics of the red man, with which to make up the Indian readers. Think of Charles Sprague, Fenimore Cooper, Hellen Hunt, Catlin, Longfellow, and others too numerous to mention.

When we come to the manual and industrial features, we come to a subject where we have only general principles to guide us. Were I to attempt an outline of manual work for either girls or boys in a given community, I should wish to spend a year in that community to find first what manual accomplishments are most highly appreciated and useful, and what may be added with promise of success. The successful business of an Indian community may take a variety of forms besides those of providing food and shelter, which must of course stand first. But every self-supporting community must export something to balance the imports which it needs and cannot produce. The strong point of a community may be agriculture, or stock-raising, or fish culture, or poultry, or some peculiar manufacture.

In my judgment the government should send an expert to every reservation to study the peculiar conditions which surround the community, and point out an industry which may be successfully inaugurated there; then the educational forces should combine to establish and promote it. I was glad to hear that Miss Reel proposes to introduce the cultivation of grasses and reeds suitable for basket-making, with a view to promoting that industry among certain tribes. I was glad also to learn that Dr. Frissell is preparing some Oneida boys, who have been with him three years, for practical work in a creamery which has been established on their reservation, so that they may be fitted for positions of leadership among their own people. Whatever the strong point is, or promises to be, must be squarely and directly recognized in the industrial training. No such general culture over several wide fields of universal industry as is given in the St. Louis Manual Training School would be

at all appropriate for Indian youth. Of course, the theory and use of the tools in common use should be taught, with the added points of method and precision, and all upon the materials at hand. Household furniture, plain houses and barns and shelters, fences and gates, culverts and wooden bridges, the woodwork of wagons and carts, the woodwork of agricultural implements, the making of boats and canoes — such work should be within the reach of a young man properly trained in an Indian community, i. e., one or more lines of such work; and the shop work of an Indian school of boys from fourteen to twenty years of age should be planned accordingly. Of course, as a part of the exact and systematic work, the simplest rudiments of drafting should be taught in even step with the tool-work.

Another very important subject, and one never yet introduced into a school, is that of a systematic use of such hardware as is needed in the building of a wooden house or in the repair of implements and tools. Costly articles, even in a white community, are thrown away and lost because the owner is unable to repair a simple break, which one familiar with tools and supplied with a little hardware would completely restore in a few moments and at slight expense. There is nothing like training in the arts of preservation and repair to promote thrift and independence, and a laudable personal pride. This should have large place in the manual training of an Indian community.

I doubt the wisdom of introducing at first ideas of art in either drawing or tool-work, as we understand art and according to our standards. An Indian has his own long-cherished ideas of art, which are widely different from ours, and he is quite sure to scorn any decided attempts to introduce our higher notions. We must reserve our pearls till a higher plane has been reached. Thrift, industry, comfort, and cleanliness are absolutely essential to any real progress. The chief difficulty is in the beginning. It is hard to begin low enough. I spent several hours among the representatives of forty-two tribes at Buffalo. I came away with the conviction that the earliest school for Indians should have a great deal of Indian and not much white man in it. Our civilization must enter as a wedge with a very thin edge. To attempt the refinements of literature and art would be to sow seed on stony ground. I do not mean that the Indian child is without capacity, but that the Indian community cannot receive and cherish it. If we aim too high, we shall not hit them, and they will remain just where they have stood for a hundred years. Hence, in all the manual work skill must be aimed at to an unusual degree, and the range of work must be extremely practical. In white schools the aim is intelligence, not skill; here we must aim at both. To be sure, the elements must be slowly and thoroly taught, but their application to a useful product must be encouraged, and even school furniture and appliances must not be too fine.

In the education of Indian girls, domestic science and household economy should hold the larger place, but even here the arts and customs of our homes must be introduced slowly and with great discretion. A girl's training must recommend itself to the Indian mother. I need not enlarge upon the training which is of most worth to an Indian girl who is soon to have a home and children, and to live with or beside her parents. Her parents and her husband must be proud of her. The value of what she got at school must be self-evident. She will not quarrel with her father's paint and feathers, if he prefer such evidence of blue blood and a renowned ancestry, but she will cheerfully consent to a better schooling for her girls than she herself received. In matters of dress and food much may be conceded to Indian fashion and fancy. They are largely matters of sentiment and involve no principles half as important as that of respect and consideration for one's parents. The needlework taught at school should be plain and should quickly culminate in garments, bedding, rugs, etc. The cooking should include every good point in the culinary arts of the Indians, with judicious advances.

You who have lived among the Indians can see where you have succeeded and where you have failed. Above all, do not lose your faith in progress, tho it be very slow. There is nothing more tenacious than inherited tastes and fancies, and nothing is more suicidal than a spirit of intolerance in matters of pure sentiment.

AN ALL-AROUND MECHANICAL TRAINING FOR INDIANS

FRANK K. ROGERS, DIRECTOR OF THE ARMSTRONG-SLATER MEMORIAL TRADE SCHOOL, HAMPTON, VA.

[AN ABSTRACT]

In the earlier days of the white man's ascendancy the mechanic was one who had more of an all-around training at his trade—in fact, he often knew much of two or more trades. There was no need of mechanical specialists in those days. In fact, there could have been found very few carpenters who could not lay a few bricks or stone, and, in times when there was no work to be had at carpentry, make pretty good farmers.

The mothers, too, had an almost endless variety of arts which they could practice with much skill, such as butter- and cheese-making, soap-making, etc.

In educating an Indian he must be prepared in the best possible way for his environment. Hampton Institute believes that this means for the boys a substantial training along some skilled line of handicraft, with as much of some other trades interwoven as will make well-rounded and useful mechanics; and for the girls, a general knowledge of the housewife's

arts, together with some other accomplishments which will make it possible for her home to become a more tidy and attractive one.

I have in mind a Cherokee boy who is about to go back to his reservation, who can do a very good job at house-building, and in addition some brick-laying, plastering, and tin-roofing. He can roughly paint a house, barn, or wagon, and has lately added to his accomplishments some skill in harness-making and shoe-making. I have seen some straps which he has just made with the buckles neatly stitched on, also a complete bridle, all of which are very creditably done. He has also half-soled and heeled his own shoes for nearly a year.

The class of girls who will return this summer have added in the last few months to their general knowledge of household work a little skill in paper-hanging, mattress-making, painting, and glazing. In mattress-making such homely experience as would be likely to be a part of the Indian girl's life has been practiced; for instance, the making of mattresses and pillows from corn husks and dry grass.

Hampton does not encourage specializing very much for Indians, believing that her trade students would either drift into the larger settlements of whites, or, not finding work at their special trades among the Indians, would become discouraged and shiftless—a drag on their people. In either case the Indian race would lose the benefit which it should get from the trained young man. I should not like to have it understood that we do not believe in being thoro in the teaching of trades. The point to be made, it seems to me, is that one trade should be learned as thoroly as possible, and then the elements of others should be added.

DISCUSSION

SUPERINTENDENT J. C. HART, Oneida Indian School, Wisconsin.—Two years ago I expressed the opinion, which I still hold, that the literary training should receive its full share of attention in the Indian school, because there is a more or less definitely prescribed course of study that each child should follow in charge of teachers especially qualified for the work.

Industrially we are not able to guarantee so much assistance, partly because the facilities are sometimes lacking, and partly because the requirements for workers in the industrial field are not so exacting as with teachers.

It is in the third direction, that of the moral training, that we are especially, perhaps necessarily, weak. So far as the work has been under my observation, the mere sharpening of the intellect does not necessarily make a better man, and in our work at least a good man is more to be desired than a great scholar. I think that as a rule I should choose that the individual be first a good man, then a good worker, and last a good scholar; for the reason that, if the man himself is upright and honest, he will probably choose to be industrious and self-supporting, and any youth who has had two or three years of school training can certainly make himself understood. It is not true, however, that the good scholar is necessarily a good man, nor is the good worker always trustworthy, altho of the two I should probably choose the worker as being the more reliable.

In the schools we aim to unite the worker and the scholar in one person, and for that purpose there is provided a corps of literary teachers, usually one for each fifty pupils, and a large force of matrons, seamstresses, cooks, farmers, etc.—all teachers of industries; but for the moral and religious training there is no special provision, and while all are expected to do what they can in this direction, it is evident that very few of those occupying such positions are especially qualified to act as guides in these higher spiritual matters.

I desire to give due credit to the missionaries, male and female, of all creeds and denominations, for their patient, unselfish services on the reservations; but in the nature of things it is not possible for them to reach the children in school as they should be reached. I am free to accept assistance from any source and by whatsoever name, provided only that the aim be the building up of strong, pure, Christian manhood.

This matter appeals to me officially as well as privately, for of all the cases of violation of marriage laws, of drunkenness, or other crimes of misdemeanor, few, if any, can be traced to the church people. I therefore appreciate these great moral forces at their full value, and only regret that it is not possible to give more attention in the schools to the moral training.

CHARACTER BUILDING AMONG INDIAN CHILDREN

MISS CORA M. FOLSOM, HAMPTON INSTITUTE, HAMPTON, VA.

[AN ABSTRACT]

For a long time to come the Indian is going to live on or near the land that belongs to him. Any system of education that does not take this into consideration is faulty. Each Indian has his allotment of land; it may not be worth much, but it is the one thing that he owns; he calls it home, and it never ceases to draw him back, no matter how far he may be tempted away. The Indian's land is undoubtedly his stock in trade, the one thing that he has to begin life upon. Where a white man can make a living an Indian *should*, and he can be so taught and so encouraged that he will have both the knowledge and the heart to make the attempt, rather than lease his land and look for other work. This would require a more systematic training in agriculture than many of our schools are now prepared to give, but a great deal can now be done by making the study of agriculture as important and as dignified as the literary work, and by so adapting it to the conditions of the country that a pupil may feel in himself the power to do just as good work as his white neighbor, only perhaps a little better.

Many students coming to Hampton have very little idea of individual responsibility. To remedy this we give each girl a room, and she is required to make it comfortable, pleasant, and pretty. Her bed linen and towels are her own and marked with her name. Her clothing is her own also, and is purchased, planned, and made by herself. On her wash-day she takes her little bag of clothes and bedding to a room fitted up with individual tubs, and there does her washing, and later her ironing,

all without the aid of machinery. At a certain time her mending must be done and her clothes must pass inspection. Every girl is given a daily task for which she is paid, and with this money her clothing is purchased by herself from the stores in town. In this way a girl is forced to learn something of the much-needed lesson in regard to the use of money and the relative value of different materials.

The boy usually shares his room with another, and they are held responsible for its care. He must keep an account of his clothing and his earnings, which must agree with the school's statement at the end of the month.

The outing system is very valuable in bringing the Indian into direct contact with an industrious and thrifty people. Every summer nearly every one of the Hampton Indian students spend four months among the farmers of New England. They deal at first hand with their employers without the intervention of the school, which develops a sense of responsibility. Their earnings during this time are peculiarly their own, and each one may make his deposit in one of the banks of the town and keep his own account. That this bank account seldom survives a winter, unless its owner has some definite purpose in view, one can easily understand.

All around Hampton the Indian can find men and women situated very much as are their older people at home. To these they lend a helping hand.

The other day I met the son of a Sioux chief coming home, cheerfully swinging his saw and hammer, from a little cabin where he had been putting up posts for a clothes line to take the place of some unsightly brush that had been serving that purpose in the front yard. The girls, too, find numberless things to do. With spade and hoe and rake they lay out grass plots, flower beds, and vegetable gardens, where only weeds had grown before, and make the shabby little yards to blossom as the rose—and the cabbage.

If the school service could employ among the more needy tribes one or more men or women to act as guides to our students when they return to their homes, much of the work that is now being lost might be saved to us. Such a person could greatly aid the student in putting into practice the useful things he learned at school, and could also assist in providing a medium of exchange between him and available markets.

Every Indian school should have shops where the more serviceable trades can be taught; but its strong point should be its farm. This should include, if practicable, the raising of stock, of poultry, and a dairy—an everyday object-lesson to the people of the reservation.

As many occasions as possible should be created to bring the people directly under the school's influence; mothers' meetings, conferences, and young people's social gatherings being held at the school in the presence of the pupils. The plan of the school should be to give each

member of the household just as much of home life as possible, thus fitting them for the life that the great majority must follow when their school days have ended.

THE DAY SCHOOL THE GRADUAL UPLIFTER OF THE TRIBE

SISTER MACARIA MURPHY, TEACHER, ODANAH DAY SCHOOL, WISCONSIN

[AN ABSTRACT]

To judge of the progress of a nation, race, or tribe, a knowledge of its past history is essential. Twenty years ago our reservation was comparatively a wilderness; the wigwam, whose inhabitants lived much after the manner described in our school histories, being the only form of habitation. But a great change has been effected. The doors of a little log schoolhouse were thrown open, and with their opening dawned an era of civilization for the reservation tribe.

Today the reservation presents a scene of beauty and civilization; almost as far as the eye can reach we see looming up everywhere neat dwellings, surrounded in many instances by well-cultivated gardens, and we exclaim: "The hand of progress has been here!" On entering a dwelling one is convinced that the occupants have been trained in mind, heart, and hand; in other words, that their teachers' purposes have been what every true educator's aim ought to be, viz., "to cultivate, to train, to develop, to strengthen, and to refine all the faculties—physical, intellectual, moral, and religious." Many of the homes here are model ones.

After all, for what are the majority of our Indian youths to be trained, if it be not for the home or family life? This admitted, that school which trains most effectually for this life is the school which does most toward the uplifting of the tribe, and this is no other than the school which is in close contact, in living sympathy, with the members of the reservation—the reservation school.

What do the average Indian youths do on leaving school? They marry and devote themselves to family life.

The reservation school should give its pupils a thoro knowledge of the common branches; it should inculcate a taste for the higher; especially should it foster a relish for good sound literature, which, while affording innocent amusement, prevents desires for the forbidden and aids so powerfully in character-molding. But while literary pursuits receive special attention, the industrial must never be neglected; hence every day school conducted according to the wise "Rules for the Indian School Service," familiar to you all, must prove one of the greatest factors in the uplifting of the reservation tribe. But to comply with these is no

easy task, and if there is any one position in the Indian-school service in which devoted, self-sacrificing men and women are more than in any other place a desideratum, it is in the day school.

DISCUSSION

M. M. MURPHY, teacher, Kingman Day School, Arizona.—The ignorance and superstition of the old Indians must be overcome before any permanent advancement can be made in the work of civilization. That this cannot all be done thru the medium of returned students has been amply demonstrated. Every superintendent would like to have his pupils spared from the ordeal of camp life, or reservation life, if it were possible. Yet these returned students would be a powerful factor for civilization, if the proper conditions prevailed at home. These conditions can be brought about thru well-equipped and properly conducted day schools. A large number of Indians are indifferent to education. But if their children must go to school, they would advocate a day school. The day school is in touch with the Indians and is the proper medium thru which to reach their home life. We can readily see that a young person needs home training as well as school training to fit him for the battle of life.

REUBEN PERRY, superintendent, Lac du Flambeau Indian School, Wisconsin.—The primary purpose of Indian education is the civilization of the race, the instilling into them of industrious, thrifty, and cleanly habits, and teaching them how to live and support themselves in a civilized way. All schools that efficiently help in attaining these ends are beneficial to the Indian and should be given due credit for what they accomplish.

It takes day, reservation, and non-reservation schools to make the system complete. The day school should give the child a few years' training and then promote him to the reservation boarding school. The reservation boarding school should, after the course is completed, encourage the brighter pupils to attend a non-reservation school where they can learn more of the outside world and more of civilization and civilized pursuits.

In answer to the question, "How many years can profitably be spent at a day school?" I would say that, under ordinary circumstances, pupils should be transferred to a boarding school after finishing the third-reader grade and when they are ten to twelve years of age.

INTROSPECTION

E. A. ALLEN, SUPERINTENDENT OF SENECA INDIAN SCHOOL, INDIAN TERRITORY

Is it true, as charged, that there may be found in the various schools of the country many pupils who are there without right? that superintendents are discovering new Indians to fill these new buildings? There is on the list of subjects to be discussed at this convention the well-worn, but always appropriate, one of how many grains of Indian pigment an applicant for admission to our schools should be able to demonstrate the presence of, and whether it should be required to have been derived from the father's side of the house. I shall not poach upon the grounds of those who would solve the question by fractions. It seems appropriate,

however, to state that the child should have some Indian blood to be eligible, and it has been charged, and probably truthfully too, that some have been admitted who can place no numerator in the fraction showing native extraction. The cases of this variety are not nearly so numerous as those of the admission of persons who, tho they have the requisite proportion of Indian color to please the most fastidious, are unfitted by reason of their age or mental make-up to be there. Who is not acquainted with the chronic school-goer who has attended a half-dozen different ones, going from one to the other as his fancy dictates, always at the expense of the government? He never becomes over age, tho wrinkles other than of care are appearing on his brow. Thousands of dollars are wasted annually on this variety of pupils. There came to my notice a few years ago the case of one young man who asked two schools to bid for his attendance. He wrote the head of one that the head of a rival institution — we have rival institutions — had made him a certain offer to come to his school, and wanted to know if *he* could offer better inducements. There seem to be two great struggles going on in many localities of our service — one, to secure more buildings; the other, to fill those we already have. The impression seems to be abroad, and has invaded some high places even, that the usefulness and dignity of a school and the caliber of a superintendent are measured by the number of pupils that he gathers together, without proper regard to the amount of good or harm done to them. Here we have a man who measures by that standard 250; and he, feeling the rule too short and that he is capable of greater things, goes to work on the office and his congressman to increase him to 500. He desires to extend rather than intensify his efforts, to know casually a great many pupils rather than to impress profoundly a few. It is offered that we are constantly straining after more buildings, more pupils, more employees, forgetting that the child is the only valuable thing in our possession, tho the only article for which we are not under bond; and that all effort is wasted that does not make directly for building him into a proper manhood. The impression that numbers make, or even conduce largely to, excellence is very erroneous. China is the most populous country on the globe, but no one would call it the greatest.

The accusation is heard, and I fear with more than a grain of truth behind it, that we are engaged in an unreasoning competition in the line of display. While we see an increasing importance accorded in the educational thought of the world to the polytechnic school, the variety that is most popular in our own little world may more properly be called pyro-technic. The band, the baseball and football teams, the music and art classes, and the school paper, however useful they may be as adjuncts, fail of their proper function when they are pointed to as the chief glory.

Have you heard of the school where class-room and shop work is suspended when there are visitors of note and the pupils are put upon dress

parade? Such displays appeal to the admiration of the casual and indiscriminating people who form a large proportion of our visitors, but they cannot win the approval of the true educator.

The Indian is already well versed in the spectacular; his painting and his ceremonies are all of that order. He should be brought to a realizing sense of the dignity of labor by some other method than chapel talks. He should be shown by example that it really is honorable to work; that it is not only honorable, but imperative; that his attaining and maintaining true manhood depends upon it; that any person or class that persists in idleness will and should perish.

I am not a pessimist, and I have unbounded faith in Indian education; but it is not heresy to suggest that we are in very many instances getting away from our proper course. Schools have now been in existence long enough that we must expect to be judged in some measure by results. We have been asked for and accorded time, but it is unfair to ask for all time before the effectiveness of our system is estimated by the products. Many graduates have gone out, as well as many hundreds of under-graduates. People are watching these young men and women, and want them to demonstrate that they have the capacity to get along in the world without being sustained by a government position, and they want to see that number sufficiently large to remove them from the danger of being considered freaks. To this end we will do well to discard a good deal of tinsel, and, while teaching, let it be in the line of making our charges a plain, honest, God-fearing people, capable of earning a living under the conditions that actually confront them.

The country has been looking for the end of distinctive Indian schools, and we merit censure if the next few years do not witness the close of many of them and the education of their former inmates side by side with other children. It is impossible to have a self-reliant people so long as any form of reservation be tolerated, be it bounded by the limits of an agency or a class school. Cannot we do more to hasten the time when we can engage in other pursuits, conscious that we have brought two races so near to each other that the line of demarkation is obliterated and all are granted equal opportunities and held to the same requirements?

DISCUSSIONS

A. WHAT SHOULD BE THE PERCENTAGE OF INDIAN BLOOD TO ENTITLE PUPILS TO THE RIGHTS OF GOVERNMENT SCHOOLS?

SUPERINTENDENT H. B. PEAIRS, HASKELL INSTITUTE, LAWRENCE, KAN.

The fact that there are a great many children in Indian schools who are only part Indian is the cause of considerable discussion upon this subject. We are very often asked: What Indians are entitled to the privileges of government schools? Indians not members of the five civilized tribes, viz., Cherokees, Chickasaws, Creeks, Seminoles,

and Choctaws, may attend government schools, is the usual reply, and is, I believe, correct under existing laws.

Whether there should be any change in such regulations is then the question to be considered.

I would draw this conclusion, then, that where Indian children, whether all or part Indian, are not within possible reach of the state for educational purposes, the national government should provide for them. Where Indians live within reach of good public schools, I believe they should be encouraged to attend them. I know of cases of this kind, however, where Indian children are not given opportunities equal to those given to white children, because the Indian parents do not pay taxes.

The question is a complex one, and it seems to me that no sweeping general law can be safely applied as to what should be the percentage of Indian blood to entitle pupils to the rights of government schools.

The nation must see to it that all of its people have educational opportunities. Where local or state government cannot reach any community of people, be they white, black, or red, I believe the national government should do so.

B. HOW CAN WE SECURE THE SYSTEMATIC TRANSFER OF PUPILS FROM DAY TO RESERVATION SCHOOLS, AND FROM RESERVATION TO NON-RESERVATION SCHOOLS?

SUPERINTENDENT J. C. HART, ONEIDA INDIAN SCHOOL, WISCONSIN

The Oneidas are a tribe of 2,000 near Green Bay, Wis. They have 65,000 acres of land, and there are on the whole between 400 and 500 children of school age. Two hundred are in outside schools, 100 being at Carlisle, 50 at Hampton, etc. We have a capacity for 220 pupils, and five years is sufficient to prepare them for going to a higher school. If they cannot go to any other school, eight years will give them an education sufficient to enable them to carry on business, and to carry it on with considerable success.

Last year eight different representatives of outside schools came to Oneida seeking pupils without any notice to me. This is a great waste of time, and is a matter which should have been turned over to the superintendents of the school to determine who are fit for transfer and who are not. These representatives would have taken Indian pupils without my knowledge and without examination. These things are unfortunate and are disastrous to the pupils. I do not know that we can devise a set of rules that can be absolutely perfect and satisfactory for the transfer of pupils. If they are willing to go, I doubt if a law can be made to prevent them. It is assuming a great deal to send children away from their parents for several years.

My idea is that the superintendents with the day-school teachers on the reservation ought to know the pupils so well that when the proper time comes for transfer they should be able to make a list, showing who, in their opinion, should go, and that those only should be solicited who are physically and mentally able.

C. CHILDREN SHOULD AT LEAST BE ABLE TO SPEAK, READ, AND WRITE THE ENGLISH LANGUAGE, BEFORE BEING PLACED IN A NON-RESERVATION SCHOOL

C. F. PIERCE, SUPERINTENDENT OF INDIAN SCHOOL, FLANDREAU, S. D.

After fourteen years' experience in both reservation and non-reservation schools, I am fully convinced that, as a general rule, no child should be sent to a non-reservation school until he has attained a fair knowledge of the English language, and has reached the age of thirteen years.

To adopt the policy of removing the Indian child from the reservation at an age of six or seven years, as is advocated by many persons, would necessitate closing or curtailing the reservation day and boarding schools, thus removing the greatest factor for advancement on the reservation.

Aside from the benefits to be derived from the presence of the child at the reservation school, there are also other reasons, from the standpoint of the child, why he should not be transferred from his home until he has passed a few years at school there.

First, the period in a child's life from six to fourteen years is a very important one, probably the most important of his early life; and climatic changes at this time have frequently been the cause of a breaking down of the constitution.

Scrofulous or tuberculous tendencies are more liable to become manifest during this period, and changes in altitude and temperature only tend to hasten the general breakup of the system. For this reason alone I contend that none but pupils of at least thirteen years of age should be allowed to transfer to any non-reservation school, where the change involves any material change in climate.

Again, the young child entering a training school does not appreciate the character of the work that should be accomplished there, and has little desire to do; the school is simply his home, and he is contented to remain there and drift with the current.

He may advance, but never with the same spirit that inspires the pupil that enters with the thought that it is a school, and that he has a task before him which he should be able to complete within a certain number of years. At the age of about fourteen years the reservation child, if he has been regular in attendance at the day school, should be ready for the sixth or seventh grade, and four years added to his knowledge already obtained should prepare him for the life he will be most likely to lead, or, in a few cases, for higher education.

At this age he enters, prepared for a broader life, with the intention of reaching a higher plane, with the knowledge that he is no longer a child to be led, but that he should rely to a greater extent upon his own strength for his standing.

Surrounded by new influences, he soon acquires new ideas and habits, and falls into line to take up the march of advancement, keeping step with others toward citizenship, with prospects for success largely in his favor.

Finally, the boy who has been taught habits of industry at the reservation school is better prepared to take up industrial training at this time than at an earlier age. At the age of fourteen years he is ready physically and mentally to take up this industrial training, not only in theory, but in practice; and I think experience has shown that better results can be obtained in the non-reservation schools between the ages of fourteen and eighteen than at other periods, provided, of course, that the proper foundation has been laid in the reservation school.

The industrial side of the Indian's education should receive highest consideration, for it is by habits of industry and frugality that he must finally make his success in life, and become a self-supporting and respectable citizen in every sense of the word.

D. THE INDIAN EMPLOYEE

C. J. CRANDALL, SUPERINTENDENT OF INDIAN SCHOOL, SANTA FE, N. M.

There are few schools and agencies at present where Indians are not employed. It is safe to say that at least one-third of the employees in the school service are Indians.

Indian employees in the service, as a rule, come from one or another of the large Indian schools that annually turn out a class of so-called educated Indians. The great objection to our system is that really the Indian is not educated when he leaves our schools, neither in the academic sense nor in the real sense of his responsibilities to himself

and the state. Education, therefore, as it is limitedly applied to the Indian, may often do him as much harm as good. This is best seen when positions are given to Indians for which they are partially or wholly unfitted. There has been too great an inclination to promote the Indian employee to some position which he could not creditably fill; then, when he failed, to charge the same to the race. There can and should be but one way of treating the Indian employee, and that is in putting him on a level with the white employee. Require him to take the same examination that the white employee must undergo, instead of assuming that a certificate of graduation from one of our Indian schools shall be evidence of his fitness for the teacher's position. To make the Indian especially favored above his white compeer does him more harm than good. To give him a position simply because he is an Indian puts a premium on Indian blood, the evil of which is to be seen in our present ration system, and on those reservations where the government has large sums on deposit to the credit of the Indians.

The needs of the Indian employee are, first, to learn that he is on an equality in all respects with the white employee, and can hold his position only by rendering efficient service; that he can aspire to those positions only for which he is qualified; that his being an Indian is neither a particular advantage nor a barrier in securing employment in the Indian-school service.

It may be said that, as a rule, the Indian makes a satisfactory employee. I am in favor of giving the Indian the first chance, when he is equal or superior to the white employee, but I make it a rule never to recommend him for a position which I feel that he cannot fill with credit.

E. THE NECESSITY OF TEACHING THE BOY TO IMPROVE THE ALLOTMENT THE GOVERNMENT HAS GIVEN HIM

F. F. AVERY, SUPERINTENDENT OF FORT SPOKANE BOARDING SCHOOL, MILES, WASH.

The arguments in favor of this proposition are plain and simple. Permanent location and ownership of a home are helpful to most of us, and especially helpful to the individual who is constitutionally inclined to roam, and yet particularly unfitted to roam among the conditions created by modern civilization.

Land is capital, endowment, opportunity. His allotment is the largest amount of capital, the best endowment, the most available opportunity, that the average Indian boy has. It is located where he is familiar with general conditions. Fortunately it is also, for a time, inalienable.

I thoroly believe that the average Indian boy should be educated and encouraged to cultivate his allotment. But this merely follows from a belief that it was a wise and beneficent thing to give him an allotment and to make it, for a term of years, inalienable. It seems appropriate to defend the two convictions together.

By way of concrete illustration, allow me to mention brief papers which a number of Indian boys with whom I am personally acquainted recently prepared as a class-room exercise on the subject: "What shall I do when I leave school." All of them were written without assistance or suggestion—except as to the subject. Some were quite crude in a literary way. But they, nevertheless, encouraged me as to the mental result of the education the boys are receiving. Each boy stated definite plans for using and improving his allotment. Each, of course, proposed to build a house, and none forgot shelter for stock. I am more hopeful of them than I should be if they were yearning to get away from their allotments into towns, and were expecting to be merchants or clerks, to work in the mines, or follow trades, or to be lawyers, doctors, or preachers. I have no prejudice against any of those callings. I simply believe that these particular boys are more apt to succeed on their land than elsewhere. If, for a few years, they hear no gospel of discontent, do not learn that the reservation is a disgraceful pen from which

they ought to escape, and are simply given by a good agent some part of the business advice and protection which the fortunately born white boy gets from his father and his neighbors, I think they will become useful, independent, and self-supporting citizens, so that there will presently be no "Indian problem" of any kind. For the solution of the problem in question is near at hand.

Leasing lands to the white neighbors is, in the majority of cases, wholly demoralizing. It is not any better for the able-bodied Indian than it is for the able bodied white man to receive an income without doing, or having ever done, anything to earn the income.

Population is congesting in cities. Mechanical industries are being minutely specialized and passing into the joint control of enormous corporations and labor unions. The professions are overcrowded. In the meantime the farm-owner and the farmer remain fairly prosperous and comparatively independent citizens. Looking at the matter broadly, does it not seem wholly desirable to attach to the land, and to country life, all who can be so attached, especially the Indians, to whom citizenship and civilization are new facts not yet fully assimilated?

RUSSELL RATLIFF, SUPERINTENDENT OF OMAHA BOARDING SCHOOL, NEBRASKA

Every Indian boy who has land should combine all his resources—native capacity, acquired growth, undeveloped possibilities, and material assets—into one organic whole for the purpose of making himself a citizen who is to be a credit to his country's flag.

No person is truly educated, no person is a safe and satisfactory citizen, who does not have the habit of industry imbedded in his character. The Indian boy's allotment provides him a location for himself, a focal point for his habit of industry. His mind, his body, his land, are all potential energy. By working his allotment he can improve his land, develop his body, train his mind, educate himself as a whole.

The farming and stocking up of an allotment help decidedly toward forming settled habits of life. Cows, pigs, and chickens, if properly cared for, require that someone stay at home and attend to them. In proportion as the Indian or anyone else roves over the country, his real advance movement will be correspondingly slow. Progress comes rather by uniting settled life with intelligent and purposeful communicative relations.

Leasing an allotment to white men may furnish a young Indian with money enough to live as well as his father lived. Farming it intelligently for himself will give him a great deal more. It will not only provide him with money enough to live better than his father lived, but will also keep him from being idle and doing worse. In making *some* more money he will make a *very great deal* more of himself.

Learning to cultivate the land intelligently, that is, with mind and thought as well as hand, should also help him to avoid that false idea, too often gotten, that the few years spent at school have so highly cultivated and refined the student that any such work as tending a farm will soil his intellect. Farming is all the time gradually becoming more and more a matter of head-work and management as well as a matter of manual labor. There is no lack of room and no lack of compensation for all the thought and study the farmer can bestow upon his work. If the Indian boy wishes his mind to keep on growing after he leaves school, he can find as much room for expansion of ideas on his farm and in his field as at the clerk's or teacher's desk.

F. PRACTICAL METHODS IN INDIAN EDUCATION

S. M. MCCOWAN, SUPERINTENDENT OF PHOENIX INDIAN SCHOOL, NEW MEXICO

It is my opinion that practical methods in Indian education, when cleared of all educational millinery, means nothing more or less than practical faculties of sensible men and women. Experience has proven to my satisfaction that there is no royal road to

manhood and womanhood; that from the heart flow the real issues of life; that the best text-book from which to study the purest ethics is the open heart of a great teacher, whose illumined faith and love are the powers that attract and bind, and whose example and influence are the forces that redeem and elevate.

Every human being should be an important factor in the body politic. By that is meant that each and all should be bread-winners; that none should be paupers or parasites. Methods will not bring about this result, but example will. Methods will not give character, but example will. Character strengthens the will and enables it to achieve — to do something; and not only to do something, but to want to do something.

It is the teacher's duty to discover the child's ideal and lead him up to it. It is not enough to develop the brain. It is not sufficient to perfect the brawn. The child should be formed to stand alone and stand proudly, grandly. This result cannot be obtained by any other method than that which appeals to the good and true in the human heart. Brain-culture may make an intellectual giant or an intellectual fool. Heart- or soul-culture will develop a man or woman whose desires and instincts are for the good, and whose ambition is to know and comfort mankind.

G. THE FUTURE OF THE PUEBLO INDIAN

MISS MARY DISSETTE, SUPERVISING TEACHER, SANTA FÉ DAY SCHOOLS, NEW MEXICO

The future of the Pueblo Indian will brighten when we begin to treat him as a responsible human being to whom we show the same respect that we demand from him; when we judge him, as we do other people, by the character and not by the complexion.

We must then provide in the future such practical education as will enable these children to make the most of the resources and opportunities of their home life. We must study the conditions of their homes, and prepare them to meet and improve them, not by destroying and abolishing the native arts and employments of their parents, but by bringing to them the benefits of the trained hand and eye, improving their quality, and extending their market.

Self-support means self-respect, which is the basis of all morality. I believe, therefore, that with the introduction into these villages of the spinning wheels and handlooms of our grandmothers there would also follow some of the shining virtues for which they were so conspicuous.

The future of the Pueblo Indian will take care of itself when every Indian child under fourteen years of age is compelled to attend a well-equipped day school, and every child between fourteen and twenty is placed in a manual-training school. The Pueblo Indian governors should learn that they and their people are amenable to all the laws of the territory, and that the office of the governor will be continued only as long as these governors respect the laws and support the schools in the matter of compelling attendance and sustaining the authority of the teacher.

H. THE NECESSITY FOR A LARGE AGRICULTURAL SCHOOL IN THE INDIAN SERVICE

C. W. GOODMAN, SUPERINTENDENT OF CHILOCCO INDIAN SCHOOL, OKLAHOMA

A large agricultural school for Indians is a necessity: (1) because the large majority of Indian boys need a practical knowledge of agriculture; (2) because a large, well-equipped school of this kind, in an agricultural region, can teach farming and the kindred industries more thoroly and economically than other schools.

Tilling the soil and caring for stock are the primary methods of earning a livelihood,

and it is upon the industries that supply mankind with food that all the other industries, trades, and professions are finally dependent. The Indians especially should learn farming and stock-raising, rather than trades, because they own land. Nearly all are receiving individual tracts of land which they should learn to care for and make the most of. Much of the Indian land is rich and fertile, as they had first choice when the allotments were assigned. Some have holdings in the arid region where irrigation is practiced exclusively, and most of the land still held in common lies in the semi-arid belt where stock-raising is the principal industry. Most Indian boys should work at farming in some form, as it is the natural employment for them, and insures the most independent as well as the most healthful life. Boys who would not live a year in a shoe shop or a tailor shop may have many years of usefulness and happiness in the open-air life of their western farms. The Indians live near to nature, but not so near as to have discovered all her secrets, so that a thoro agricultural training is essential to success. It is well for these boys to know something of carpentering, blacksmithing, painting, and plastering, and some may be called to teach or preach, or practice law or medicine; but of those who own land many more can make a comfortable living on farm or ranch than will succeed at a trade or in a profession.

A large, well-equipped school of this kind, in an agricultural region, can teach farming and the kindred industries more thoroly and economically than other schools. While nearly all the large schools have farms, they do not make farming the important feature. Some are not in an agricultural region; some have unproductive soil; and few, if any, have a sufficient quantity of tillable land. Chilocco, with its 8,600 acres of choice land, should be the great agricultural school. It is centrally located in the rich farming region of Oklahoma, where the conditions are similar to those that surround the Indians of a large area. There are about 80,000 Indians, exclusive of the Five Tribes, within a radius of 600 miles. Being on the border between the North and South, and near to the uncertain boundary line of the semi-arid regions, the crops and the methods of caring for them partake of the nature of all of these areas. Wheat is harvested with both binder and header; corn is planted with check rower and lister. We can raise the southern crops of cotton and castor bean; the northern products of flax, broom corn, and oats; corn and clover for the East; and alfalfa, barley, millet, and sorghum for the West; peaches, apples, grapes, and cherries for everybody; and cattle and wheat for the world. This school would differ from the agricultural college in increasing the practical and limiting the theoretical teaching. The boys would learn to do by *doing*, under the direction of a sufficient number of competent, educated farmers to insure thoro work.

I. COMPULSORY EDUCATION

H. B. PEAIRS, HASKELL INSTITUTE, LAWRENCE, KAN.

The report of the honorable commissioner of Indian affairs for the fiscal year ending June 30, 1900, shows that there are in the United States, under government control, between 45,000 and 47,000 Indian children of school age. Of this number there are probably 30 per cent. who, on account of health and various other reasons, should not be enrolled as students. This leaves about 35,000 children of school age who should be in school.

The capacity of all schools where Indian children are admitted was, according to the report herein referred to, 27,460. The enrollment was 26,451. The average attendance was 21,568. The great difference between the enrollment and the average attendance was partially due, no doubt, to the fact that in many schools pupils who are not physically qualified for enrollment are received because it is difficult to keep up the attendance. Of course, there are other causes for the discrepancy between the enrollment and the average attendance, but it is fair to assume that of the 30 per cent. who are classed as disqualified because of health, etc., 2,000 are, for various reasons, received and

enrolled. If this be true, it would be safe to estimate, say, that there are 10,000 children of school age who are in every way eligible who are not in school.

An analysis of these statistics shows that, if the attendance were kept up to the capacity of the schools, about 6,000 more children could be accommodated than are now in school. With the increased accommodations that have been provided during the past year it is probable that more than that number, in addition to those in school, could be accommodated. To provide these schools the government has expended thousands, yes millions, of dollars. The cost of maintaining these schools during the year 1900 was, to the government alone, \$2,489,529.49.

With all the foregoing statistics in mind, it is scarcely necessary to argue the question as to the need of compulsory education for Indians. It is a clear case. There are thousands of uneducated Indian parents who are standing in the way of the education of their children, for whom the government has provided educational opportunities by large and liberal expenditures of money raised by taxation. If one body of citizens must be taxed to support schools for other citizens, or wards, these other citizens, or wards, in the interest of the state or nation, should, I believe, be compelled to attend those schools.

The people are willing to be taxed for the purpose of aiding general education, but I do not believe that they would approve of expending millions of dollars year after year, and then going meekly to ignorant, superstitious Indians and asking them whether or no they will send their children to partake of the advantages provided and paid for. There is a feeling that Indian educational work should be only a temporary work, and that is certainly true. As rapidly as possible it should be merged into the great educational work for Americans. To this end, we believe, all Indian children of suitable age should be kept in school.

When I was asked to discuss this question, it seemed to me that any one person's opinion upon the subject would be of comparatively little weight, but that, if the consensus of opinion of agents, superintendents, and other field workers could be secured, definite action might result therefrom. With this in view, I took the liberty of sending out circular letters to about 325 officials in all sections of the United States.

The questions were as follows:

1. Do you or do you not favor compulsory education?
2. If so, why; if not, why?
3. Please state briefly the essential points which, in your opinion, should be included in the law.
4. When did you enter the service?

One hundred and eighty replies were received, there being from:

Agents.....	26
Bonded-school superintendents.....	33
Reservation-school superintendents.....	49
Day-school teachers.....	68
Supervisors.....	8
Special agents.....	1
Members of board of Indian commissioners.....	1

One hundred and seventy-six of these persons are in favor of compulsory education; four are opposed.

GEORGE W. NELLIS, SUPERINTENDENT OF SAC AND FOX INDIAN SCHOOL, IOWA

The purpose of the government in its plan of education is to prepare the Indian youth for the privileges and responsibilities of citizenship, and for complete absorption into the body politic of the nation.

Many difficulties are experienced in getting Indian children into school, most of them due to the ignorance and prejudices of the older people. Few of these people have any appreciation of the benefits accruing to their children from attendance at school. Many of them have never been beyond the confines of the Indian country, have never

mingled with white people, and know nothing of the civilization it is sought to impart to their children. Entirely content with their present mode of living, and knowing nothing better, it is difficult indeed to create in them a desire for something better for their children, especially when it will involve a separation from, and transfer of, control over them.

Indians in their native state consider labor as degrading. Many of them, by reason of the regular issue of rations, the payment of annuities, and the leasing of their lands, feel no necessity for labor. To these the placing of their children in school, where they are required to work, seems like giving them into slavery.

It is often the case that well-disposed Indians would be glad to have their children in school, but have not the moral courage to withstand the ridicule and taunting of their non-progressive neighbors. Young people and children are many times anxious to attend, but are prevented from doing so by ignorant parents or other relatives. Children have run away from their homes and come to the school only to be called for and taken away. I have seen such children carried away by force, they struggling and begging piteously to be allowed to remain.

These difficulties would be obviated in a great measure by the enactment by Congress of a law giving to the commissioner of Indian affairs authority to place every Indian child of proper age and suitable condition of health in the school best suited to his needs, regardless of the consent of either child, parent, or other person.

Such a law would bring the child into school at an early age, at a time of life when his mind is plastic and open to impressions, and when the effects of inheritance and former environment can be most easily counteracted. It would also keep the child in regular and continuous attendance.

Do not the interests of the child demand compulsory education? Is it not somewhat incongruous to make the education of the child dependent upon the consent of the ignorant and uneducated parent, who has no appreciation whatever of its value? In permitting such parent to prevent the education of his child, do we not infringe upon the rights of the child and grant to the parent a right that is not morally his? The parent, of course, is the natural guardian of his child, but there is certainly a limit to his authority as such guardian. If he controls the child and his affairs with due regard to the best interests of the child, he should remain undisturbed in such control. If, however, he uses his authority in a manner antagonistic to the interests of the child, he violates his trust, and should be relieved of it. A compulsory school law, administered with judgment and discretion, would do no violence to the rights of parents, but would protect those of innocent and dependent children.

In the language of a recent report of a reformatory institution, "it is far cheaper as a money investment . . . to save a child from becoming a criminal than to deal with him after he has become one." If the states are justified in using compulsory measures in securing the attendance of white children at school, surely the general government, in its effort to prepare the Indian youth for citizenship, is justified in employing similar measures. Let me quote the following words from General Morgan, former commissioner of Indian affairs, than whom no man can speak with more intelligence, or has a right to speak with more confidence: "Ample provision should be made for the accommodation of the entire mass of Indian school children and youth. To resist successfully and overcome the tremendous downward pressure of inherited prejudice and the stubborn conservatism of centuries, nothing less than universal education should be attempted. Whatever steps are necessary should be taken to place these children under proper educational influences. If, under any circumstances, compulsory education is justifiable, it certainly is in this case. Education is the Indian's only salvation. With it they will become honorable, useful, happy citizens of a great republic, sharing on equal terms in all its blessings. Without it they are doomed either to destruction or to hopeless degradation."

Report of the Committee on Necrology

To the Members of the National Educational Association:

Your Committee on Necrology submits, herewith, the following list, with accompanying brief sketches, of active members of whose death information has been received since the last report, published in the volume of proceedings for 1900 (Charleston meeting):

SAMUEL DEWITT BEALS	- - - - -	Omaha, Neb.
GEORGE THOMPSON FAIRCHILD	- - - - -	Berea, Ky.
BENJAMIN REA GASS	- - - - -	Denver, Colo.
CALEB G. HALL	- - - - -	New Berlin, N. Y.
BURKE AARON HINSDALE	- - - - -	Ann Arbor, Mich.
S. H. KELLOGG	- - - - -	Los Angeles, Cal.
JOHN ARNOLD KLEINSORGE	- - - - -	Greeley, Colo.
JOSEPH LE CONTE	- - - - -	Berkeley, Cal.
E. B. McELROY	- - - - -	Eugene, Ore.
JOHN M. MEHAN	- - - - -	Des Moines, Ia.
F. A. MOOD	- - - - -	Kilgore, Tex.
JOHN A. MOORE	- - - - -	Wailuku Maui, H. I.
JACOB THEODORE MERRILL	- - - - -	Cedar Rapids, Ia.
LEWIS MILLER	- - - - -	Akron, O.
R. V. K. MONTFORT	- - - - -	Newburgh, N. Y.
HENRY RAAB	- - - - -	Belleville, Ill.
JOHN CYRUS RIDGE	- - - - -	Cincinnati, O.
WILLIAM J. WILLIAMS	- - - - -	Columbus, Neb.

It is a matter of regret that it has been impossible to secure data for sketches of S. H. Kellogg, F. A. Mood, and John A. Moore in time for insertion in this report.

Respectfully submitted,

(Signed) W. E. CROSBY, *Chairman*.

NEW YORK CITY, November 16, 1901.

Samuel DeWitt Beals

This distinguished educator was born in the village of Greene, Chenango county, N. Y., January 10, 1826. He died at Omaha, Neb., April 27, 1900. Altho subject to delicate health during his entire life, he lived and labored intellectually to the ripe age of seventy-four years.

His education began in the schools of his native village and was carried forward in a private school at Coventry, and in Oxford and Norwich Academies, New York.

He began active life as a farmer in 1848, but bodily health failed, and ten years later he turned to teaching, the work which occupied the remainder of this long life, forty-two years.

Mr. Beals moved with his family to Omaha in 1861. He at once opened a private school in the old state house, and for six years this was known as the Omaha High School. This school was well patronized, and pupils came from long distances, but, owing to local circumstances, the institution proved an unprofitable financial enterprise.

In 1869 he was appointed state superintendent of public instruction by the governor of Nebraska. His work in this office was largely that of a pioneer, and his duties were difficult and arduous. He secured the first equitable distribution of the school funds of the state. He made a thoro visitation of the schools thruout the state, held teachers' institutes, counseled with county superintendents and boards of education on district organization, made addresses, and promoted the building of schoolhouses wherever needed. He designated the text-books to be used thruout the state, despite opposition and regardless of private interests. He regarded a public office as a public trust, and no man could make him swerve from faithfully performing every duty, without regard to partisan or private interests. To his supervision and wise administration of the schools Nebraska owes much of her educational prosperity.

At the close of his term in 1871-72 he classified the schools of Omaha in accordance with a course of study previously prepared by himself, assisted by Lyman Hutchinson. During 1872-73 he was principal of one of the Omaha schools. He was elected county superintendent of Douglas county in the fall of 1873, but resigned this office in July, 1874, to take the superintendency of the Omaha city schools, which position he held for six years, successfully conducting these schools to a condition entitling them to rank among the best in the country.

He ended his educational career as a teacher in the Omaha High School. Toward the end of his life, his health failing, he was largely relieved from teaching and served as librarian until his death.

Mr. Beals became a life member of the National Educational Association at the meeting in Baltimore in 1876.

George Thompson Fairchild

Dr. Fairchild was born at Brownholm, O., October 6, 1838; he graduated from Oberlin College in 1862, and from the Oberlin Theological Seminary in 1865, receiving from his alma mater the degree of A.M. in 1865 and of LL.D. in 1893. He was the youngest of three brothers, all of whom became presidents of colleges — all distinguished, rising to the first rank in the calling — men of commanding ability and beneficent influence.

The family was of the great race of pioneers of Ohio. The parents, but a few years married, moved to the northern part of the state while it was yet a wilderness. A clearing was made and a log-cabin built, and thus the typical American home began, with its peculiarly rugged but soundly informing life.

George T. Fairchild was tenth in a family of eleven children, and was a pupil and student at Oberlin from childhood until he graduated from the Theological Seminary in 1865. Farm life and school life together during the same years of growth combined to educate the man, producing a sound mind in a sound body.

During his college course he taught school at intervals in Michigan, and near its close was tutor in the preparatory departments of Oberlin College.

On November 25, 1863, the day of his parents' golden wedding, he was married to his classmate, Charlotte Halstead. Two years later he was chosen to the professorship of English literature in the State Agricultural College of Michigan, where he remained fifteen years, and for a portion of the time was acting president. His talent and success commanded wide recognition, and in 1879 he was invited to the presidency of Kansas State Agricultural College. Under his administration of this institution the number of its students increased from three hundred to eight hundred, and its organization was carried to a high degree of efficiency.

His great ability and usefulness, long continued in unsparing and unselfish devotion, did not protect him from the worst enemy of public educational service — political

intrigue. But the scandalous attacks upon him by unscrupulous partisans were not able to cause any measure of resentment on his part. He left Kansas disappointed, but with no loss of character or prestige. A revolution soon came in Kansas political affairs. He was invited to return, but declined. In 1898 he went to Berea, Ky., and was made vice-president of Berea College, with which institution, its history, its character, and its aims, he was in full sympathy. He possessed in an eminent degree the rare qualities of an executive manager, and was also a fine disciplinarian as well as a great teacher. He was everywhere popular and influential, and his relations with students and associates were those of a loved master and a genial gentleman.

He was made a life director of the association at the meeting at Topeka, Kan., in 1886.

Benjamin Rea Gass

Benjamin Rea Gass was born on a farm near Mansfield, Richland county, O., January 27, 1837. His father was a Disciple minister.

He served for a short time in the Civil War, in the One Hundred and Fifty-fourth Ohio Volunteers.

He was a student at Antioch College while Horace Mann was president, but did not graduate until 1866. He received the degree of A.M. from Antioch College in 1869.

He taught school in Ohio, Michigan, Iowa, and Colorado—most of the time as superintendent of city schools. From the fall of 1888 until the time of his death, March 25, 1901, he was engaged in school work in Denver—first as principal of Ebert School and afterward of Hyde Park School.

Mr. Gass belonged to a well-known Ohio family, members of which were prominent in public affairs.

He became an active member of the National Educational Association at the Los Angeles meeting, 1899.

Caleb G. Hall

Mr. Hall was born in the town of Pittsfield, N. Y., July 22, 1824. Here, in his birth-place, he lived and worked during his entire life. He died March 4, 1901, on the same farm where he was born. His vocation was farming, in which he was very successful. He received a good schooling at the New Berlin and Gilbertville Academies.

He was an influential free mason and a member of the Patriotic Order of the Sons of America.

An enthusiastic admirer of Washington, he erected two fine monuments in the cemetery at New Berlin commemorative of George and Mary Washington. He was a liberal giver to public enterprises, and generously aided many young people to obtain an education.

The life and deeds of Caleb G. Hall are sufficient testimony that he was eminently qualified to be made a life director of the National Educational Association, which was done at its meeting at Saratoga in 1885.

Burke Aaron Hinsdale

A full sketch of the life and character of Dr. Hinsdale, by President Angell of the University of Michigan, may be found on p. 387 of this volume.

John Arnold Kleinsorge

John Arnold Kleinsorge was born at Maquoketa, Ia, in 1867. He graduated from the State Normal School at Cedar Falls, Ia., in 1890; after which he taught in the public schools of Iowa for five years, filling the principalship of Crocker School, Des Moines, for three years. He then went to Europe, spending four years in the German universities, and in traveling. He obtained the degree of doctor of philosophy from Jena in 1899. While in London, in 1897, he was married to Miss Eliza George, a former teacher in the West Des Moines High School.

Upon returning to America, he held the chair of pedagogy in the State Normal School, Oswego, N. Y., for a term. The following year he became the principal of the training school in the State Normal School, Greeley, Colo., which position he held till the time of his death, which occurred in Denver, in March, 1901.

He became an active member of the National Educational Association in January, 1901.

Joseph Le Conte

Professor Joseph Le Conte was born in Liberty county, Georgia, February 26, 1823.

His career began with the study of law, which soon became distasteful to him. Medicine next attracted him, and he took a course in the New York College of Physicians and Surgeons. Finally he went to Cambridge, Mass., where he became a student of zoölogy and geology, under the great master Agassiz, and this determined his life-work. He also gave some attention to chemistry and held professorships of this science in Georgia and South Carolina. During the Civil War he had charge of the Confederacy's laboratory for the preparation of niter to be made into gunpowder.

In 1869 he was chosen professor of geology and natural history in the University of California, where he remained thirty-two years, until the end of his life, closing his eyes in death while pursuing his favorite vacation pastime—the study of mountain formations and sculpture amid the familiar scenes of the Yosemite valley. A student of nature always, he was also a great teacher in the class-room and by his publications. His works embraced a wide range of observation and thought. The chief ones were: *Religion and Science* (1874), *Elements of Geology* (1878), *Sight, An Exposition of the Principles of Monocular and Binocular Vision* (1881), *Compend of Geology* (1884), *Evolution in its Relation to Religious Thought* (1888), and fugitive papers for magazines. While yet a college student his insight into biology fitted him to appreciate the force of Darwin's theories. Doubtless the teachings of Agassiz exerted a powerful influence upon his mind. He had strong religious convictions. His thought was distinguished by its originality and versatility; his manners were genial and courteous; these qualities made his personality very attractive, especially to his pupils and associates. He was widely known at home and abroad. Some of his works were used as text-books in Oxford University.

President Benjamin Ide Wheeler of the State University of California voiced the feelings of Professor Le Conte's associates in the faculty of that institution in saying: "His soul was as clear and as pure as crystal. Even thru the pages of his books shone out the warmth of his personality. For thirty-two years he has been a great, vital power in the University of California. No man can estimate the value of the influence he has exerted."

Professor Le Conte became an active member of the National Educational Association in 1895, at the meeting in Denver.

E. B. McElroy

Professor McElroy was born in Washington county, Pennsylvania, September 17, 1842. He died at Eugene, Ore., May 4, 1901. He attended the common schools of his native county and afterward the State Normal School of Pennsylvania. He became a teacher in 1861, but in the fall of that year enlisted in the Union army, Company B, First Regiment, West Virginia Volunteers. In 1863 he re-enlisted in the One Hundredth Pennsylvania Volunteers, continuing in the service until the close of the Civil War, in 1865. He fought in the battles of Cheat Mountain, Romney, and Winchester; also in the battles of the Wilderness, Spottsylvania, and others, under General Grant, and was at the assault on Petersburg and the surrender of Lee.

He then spent two years more in college, when he began his life-work as a teacher, eight years of which were given to the public schools of West Virginia and Pennsylvania.

In 1873, with his family (having been married to Miss Agnes McFadden in 1869), he moved to Oregon, and settled at Corvallis, where he taught two years. In 1875 he was elected professor in the State Agricultural College. While serving in this institution he was chosen superintendent of the schools of Benton county, and was twice re-elected. He received the degree of Ph.D. from Willamette University in 1884.

In 1882 he was chosen superintendent of public instruction for Oregon, and was twice re-elected, his last term ending January 14, 1895.

Soon after, he was appointed to a professorship in the Oregon State University, at Eugene, where he resided until his death, May 4, 1901.

Professor McElroy became an active member of the National Educational Association in 1895. He was already a leader in educational affairs in his adopted state, having attained a paramount influence in giving shape and character to its system of public schools.

Professor McElroy added to his fame as a schoolmaster renown as a citizen. He served his country well as soldier, teacher, and citizen, and his life at the end was crowned with the honors that belong to such services.

John M. Mehan

John M. Mehan was born in Bath, Va., October 6, 1845. He was left an orphan at an early age, and made his home with a merchant at Vandalia, Ill., where he got some schooling and learned the wheelright trade. At the age of twenty he took the trail to Montana, driving a yoke of oxen, and spent ten years prospecting and mining. Returning to Iowa in 1872, he taught school in Story county. While thus engaged, he was compelled to study hard to keep ahead of his pupils, but succeeded finally in gaining time to take private lessons in penmanship, and soon attained the skill of an expert in the art. He taught at Nevada and Ames, serving as principal of the high school of the latter place. Afterward he accepted a situation as special teacher of penmanship, drawing, and bookkeeping at Creston. For a time he was engaged with the New York Life Insurance Co., in which position he acquired great versatility in every form of practical knowledge bearing upon his work.

In 1884, together with others, he established, at Des Moines, the Capital City Commercial College. Mr. Mehan was president of the institution and chief owner.

Professor Mehan was known as a hard and intelligent worker, especially on the educational lines for which he had a special gift. This spirit made him an active and well-known figure at educational conventions.

He became a member of the National Educational Association in 1892, with which he continued in active relations until his death, March 9, 1901.

Mr. Mehan was also a teacher in Sunday schools for years, and was a member of the Presbyterian church. To his many useful intellectual activities he added that of editing and publishing *The Accountant*, a journal for bookkeepers, and later *The Iowa Schools*, a journal for teachers. He was also a writer for a syndicate of western newspapers.

Had this lifelong busy worker in intellectual fields been less energetic, less conscientious, less sensitive to his own fancied shortcomings, he might have lived longer in the body. But he was withal so earnest, so lovable, so genial, so modest and unpretentious, that in the daily losing of this life he found another and a better.

Jacob T. Merrill

The subject of this sketch, born April 11, 1839, at Granville, O., was left motherless at two years of age. At seven he left home and began to make his own way in the world. He soon found a good home on a farm among strangers. His book education began in a country school, and he was happy in the necessity for working his way thru Otterbein University, Ohio, for a self-secured education is a reliable dependence for such a career as lay before him. In 1861 he was teaching a boys' school in Illinois, when the call to arms came. Leaving his school, he enlisted for the war, but was not called into active service.

After the close of the war he taught a country school for a while, and then went to the village of Lafayette, Ind., where he served as principal of the high school for two years, and was then chosen superintendent. In this office he remained for twenty-seven years.

In 1898 he was chosen superintendent of the city schools of Cedar Rapids, Ia., where his educational career ended in the midst of his devotion to the highest interests of the city of his adoption.

In Iowa he was twice offered the state superintendency, but declined to be a candidate.

Professor Merrill was active in the wider educational movements of his time; was a regular attendant upon, and an enthusiastic worker in, teachers' meetings and conventions; was president of the Indiana State Association in 1878; became an active member of the National Educational Association in 1893, and was vice-president of the association at Asbury Park in 1894.

He died June 22, 1901, at the home of his sister in Ligonier, Ind., where he was then visiting.

Lewis Miller

Lewis Miller was born at Greentown, O., of Holland ancestry. After obtaining the rudiments of an English education in country schools, he graduated from an Illinois academy and taught country schools for a time.

By the age of twenty-five he was an inventor of mowing and reaping machinery, and soon established himself in a machine shop at Canton, O.

A few years later he removed to Akron, O., where he established a large agricultural implement factory, and where he lived until the time of his death. He also became the president of two other large manufacturing companies, one at Canton, O., the other at Mansfield, O.

His life was given mainly to the invention and manufacture of harvesters and threshing machines, in which he amassed considerable wealth.

He was also largely interested and very active in church and Sunday-school work, as

well as in general education. He is perhaps most widely known as the joint founder, with Bishop John H. Vincent, and president of the Chautauqua Assembly. He was a staunch friend and supporter of the public schools, as well as the benefactor of several colleges. He became a life member of the National Educational Association in 1880.

Mr. Miller was the father of eleven children. His wife and eight children survive him. One of his daughters is the wife of Thomas A. Edison. His youngest son was one of Roosevelt's Rough Riders, and was killed in the battle of San Juan Hill.

Mr. Miller died in New York city, February 17, 1899.

Dr. R. V. R. Montfort

Dr. Montfort became a member of the National Educational Association in 1892.

Altho a physician by profession and many years' practice, he was, in some capacity, connected with the schools of Newburgh the greater part of his life.

His education was obtained by a series of severe struggles, but his untiring and ambitious efforts gained for him a position as teacher in a district school at fifteen years of age. He taught for several years in the counties of Dutchess and Putnam, New York, and improved his scholarship by private study in leisure hours. For a few months he taught in a private academy at Newburgh. He then gave up teaching for the study of medicine, and prepared himself for entrance to Albany Medical College, where he graduated in 1856. He at once began the practice of medicine in Newburgh.

In 1859 he was elected clerk of the board of education and superintendent of the public schools of that city.

In 1862, resigning his office in the schools, he accepted a commission as assistant surgeon in the One Hundred and Twenty-fourth New York Volunteer Infantry, and was with the army of the Potomac in every battle from Chancellorsville to the end of the war. He was promoted for worthy service and qualifications in 1865, and mustered out of service in June of the same year.

Dr. Montfort was a member of the Episcopal church and one of the founders and prominent officials of the Y. M. C. A.

Doubtless the most important and influential service given to the public by this able and typical American citizen was that of supervision in the common schools of Newburgh for nearly thirty years. He died December 29, 1900, in his sixty-sixth year.

Henry Raab

Henry Raab was born at Wetzlar, Rhenish Prussia, June 20, 1837. He died at his home in Belleville, Ill., March 13, 1901.

He was a carrier by trade, but had received a liberal education in Prussia. He came to America in 1853, locating at Cincinnati, where he pursued his trade for a short time. Later he went to St. Louis, near which city he managed a farm; but soon settled near Belleville, St. Clair county, Ill., and in 1857 became an assistant teacher in the public schools of that city. His success led to his appointment as city superintendent in 1873.

In 1882 he was elected state superintendent of public instruction. At the end of his term he declined renomination, but accepted a second nomination in 1890. In 1894 he was again a candidate, but was defeated.

He was connected with the public schools of Illinois for nearly half a century. He

was large-minded as an educator, and especially distinguished for liberality and impartiality in his administration of the office of state superintendent of public instruction.

Professor Raab became a life member of the National Educational Association in 1884, at the meeting in Madison.

John Cyrus Ridge

John Cyrus Ridge was born April 6, 1841, on his father's farm near Waynesville, O., where his boyhood was spent. He obtained his early education in the same country school in which he began teaching at the age of nineteen. For a time he attended the Ohio Wesleyan University, and later accepted a position with the publishing firm of Van Antwerp, Bragg & Co., of Cincinnati, with whom and their successors, the American Book Co., he remained for more than a quarter of a century. He died at his home at Mount Auburn, Cincinnati, O., on January 31, 1901.

Mr. Ridge was one of a famous company of Ohio teachers who had their birth in Clermont county, Ohio, where General Grant was born. He too possessed the marked characteristic that distinguished them all — Rickoff, Hancock, Parker, Page — great executive ability. Several of these men, at the breaking out of the Civil War, enlisted and served in the Union army with the same eminent ability and devotion which they all showed in the great army of peace in which they also mustered and trained.

Mr. Ridge's labors as the agent of a great schoolbook publishing house were characterized by forceful ability and high-minded integrity, and were always beneficent for the cause of education, whose highest interests he never failed to serve. He became an active member of the National Educational Association in 1897, at the meeting in Milwaukee.

William J. Williams

William J. Williams was born June 4, 1845, in Licking county, Ohio, of Welsh parents. At the age of twelve he began to contribute to his own support, and in 1862 commenced a regular classical course at Denison University, Granville, O. Working between times in the harvest field or teaching school, he finished a seven-years' course and graduated in 1871.

He at once took up the profession of teaching and secured the principalship of the schools at Winamac, Ind., remaining there two years, and then going to Rochester, Ind., where he was county superintendent for two terms and city superintendent for nine years. From Rochester he went to Franklin, Ind., in 1886, to take the chair of pedagogy in Franklin College. He held this position for one year and then became superintendent of the Franklin schools. On account of the failing health of his wife, he resigned at Franklin in 1893 and traveled.

After the death of Mrs. Williams in November of that year he accepted the principalship of the Marion, Ind., High School for the remainder of the term, and in 1894 became superintendent at Columbus, Neb. This position he held at the time of his death, December 6, 1900.

He took a prominent part in the educational work of Nebraska, being a member of the state reading circle board and also president of the Northern Nebraska Teachers' Association one year.

Mr. Williams became a member of the National Educational Association at the Denver meeting, in 1895.

LIST OF LIFE, ACTIVE, AND CORRESPONDING MEMBERS

ARRANGED BY STATES, CLASSES, AND YEARS OF CONTINUOUS MEMBERSHIP

REVISED TO NOVEMBER 1, 1901

The marginal figures indicate the year of the commencement of continuous annual membership for those whose names immediately follow. The indented figures indicate year of appointment to present educational position. The value of this list as an educational directory depends upon its accuracy and completeness; all members are invited to contribute to this end by furnishing corrections of errors, however slight, and by supplying omitted data.

Extra copies of this list may be obtained by remitting twenty-five cents to the Secretary, Winona, Minn.

CORRESPONDING MEMBERS*

ENGLAND

- 1898 MISS DOROTHEA BEALE, Associate of Queen's Coll., London.
First Lady Mathematical Tutor, 1850-57; also Latin Tutor; Principal of the Cheltenham Ladies' College since 1858; Officier d'Académie of Paris, 1889; President of the Association of Head Mistresses, 1895; Tutor in Letters of the University of Durham, 1896; Author of various Reports, Essays, and Text-Books. *Address:* Ladies' College, Cheltenham, London.
- SIR JOSHUA FITCH, A.M., '52; Fellow, '75, of the Univ. of London; LL.D., St. Andrew's Univ. Formerly Principal of the Training College of the British and Foreign School Society; Her Majesty's Inspector of Schools and Chief Inspector of Training Colleges, 1863; Knighted for Public Services on his Retirement from Office, 1896; some time Examiner in Cambridge and London Universities and for the Civil Service; Author of Lectures on Teaching delivered before the University of Cambridge, 1880, and other Books and Essays. *Address:* 13 Leinster Sq., Bayswater, W., London.
- MICHAEL ERNEST SADLER, A.M., Trinity Coll. and Christ Church, Oxford.
Secretary of the Oxford University Extension Delegacy, 1885-95; Student and Steward of Christ Church, Oxford, 1890-95; Member of the Royal Commission on Secondary Education, 1893-95; Director of Special Inquiries and Reports to the Board of Education (England and Wales) since 1895. *Address:* Whitehall, S. W., London.
- HON. E. LVULPH STANLEY.
Member of Board of Education of London. *Address:* London.
- 1901 CLOUDESLEY S. HENRY BRERETON, A.B., '96, A.M., '90, St. John's Coll., Cambridge; B. és L., L. és L., Univ. of Paris.
Examiner in Modern Languages to the Joint Scholarship Board, 1899-1901; Examiner in French to the Cambridge University Local Syndicate, 1898-1901; Examiner in Modern Languages to the Oxford and Cambridge Joint Board, 1899-1901; Vice-President of the International Jury for Primary Education at the Paris Exposition, 1900; Appointed to Inquire into the Teaching of Modern Languages in Ireland, 1901; Writer on Education in "Fortnightly Review," "The Times," "Saturday Review," etc.; Author of various Reports; Addressed the National Educational Association of the United States at Detroit, Mich., 1901, on "The Educational Crisis in England." *Address:* Briningham House, Melton Constable, England.
- FABIAN WARR.
Inspector of Secondary Schools for the Board of Education of London; Assistant Director of Education for the Transvaal. *Address:* 54 Goldhurst Terrace, Hampstead, N. W., London; *colonial address:* Pretoria, S. A.

*Several names appear in this list without full description because the data had not been received at the time of going to press.

SCOTLAND

- 1898 SIMON SOMERVILLE LAURIE, A.M., LL.D., Univ. of Edinburgh, F.R.S.E.; Hon. Fellow of the Educational Institute of Scotland, and of the Comenius Society, Germany.
 Professor of the Institutes and History of Education, Edinburgh University, since 1876; Visitor and Examiner to Dick Bequest (educational) Trust since 1876; Secretary to the Endowed Schools (Scotland) Commission, 1872; Secretary to Association for Promoting Secondary Education in Scotland, founded 1876; at one time President of Teachers' Guild of Great Britain and Ireland; Member of Edinburgh University Court; Author of various Philosophical and Educational Books and Articles.
Address: 22 George Sq., Edinburgh.

FRANCE

- 1898 FERDINAND BUISSON.
 Professor of Education at the Sorbonne. *Address:* Paris.
 J. J. GABRIEL COMPAYRÉ, Ph.D., 1873.
 Professor of Philosophy, Lycées de Pau, 1865—de Poitiers, 1868—de Toulouse, 1871; Professor of Philosophy, Faculty of Letters of Toulouse, 1874; Professor of History of Education, Normal School of Fontenay aux Roses, 1880—Normal School of St. Cloud, 1881; Member of Chambre des Députés, 1881-89; Rector of the Academy of Poitiers, 1890-95; Rector of the Academy and University of Lyons, 1895; Corresponding Member of the Institut de France, 1901; Rector at the University of Lyons. *Address:* Lyons, France.
 PIERRE ÉMILE LEVASSEUR, Doctor (ad Honories), Univ. of Columbia and Univ. of Budapest; Litt. D., '56.
 Professor of Letters and Rhetoric, and of History, at several Lyceums, 1868; Professor at the College of France since 1868; Professor at the Institute of Arts and Trades, 1871-96; President of the Association for the Secondary Instruction of Young Girls at the Sorbonne since 1881; President of the Statistical Commission of Primary Instructors since 1876; Corresponding Member of the Academies of Prussia, Sweden, Hungary, and of the American Academy of Political and Social Science.
Address: 26, rue Monsieur-le-Prince, Paris.
 1901 CHARLES BAYET.
 Director of Primary Instruction in the Ministry of Public Instruction of France. *Address:* 27, rue Gay-Lussac, Paris.
 LÉON BOURGEOIS.
 Formerly Minister of Public Instruction; Member of the Chamber of Deputies. *Address:* rue Palatine, Paris.
 ELIE RABIER.
 Director of Secondary Education in the Ministry of Public Instruction. *Address:* 24, rue de Fleury, Paris.
 CAMILLE SÉE.
 Counsellor of State. *Address:* 65, avenue des Champs-Élysées, Paris.

GERMANY

- 1898 FRIEDRICH PAULSEN, Ph.D., '71, Berlin.
 Professor of Philosophy and Pedagogics, University of Berlin, since 1877. *Address:* Steglitz Fichtestrasse 31, Berlin.

ITALY

- 1898 LUIGI BODIO.
 Member of the Council of State and President of the Superior Council of Statistics. *Address:* Roma, Italia.

RUSSIA

- 1901 E. P. KOVALEVSKI.
 Officer of the Imperial Ministry of Public Instruction. *Address:* St. Petersburg.

HUNGARY

- 1901 BÉLA DE TORMAY.
 Chief of Bureau in the Royal Ministry of Agriculture. *Address:* Budapest.

ARGENTINE REPUBLIC

- 1901 JOSEPH BENJAMIN ZUBIAUR, LL.D., '84, Univ. of Buenos Ayres.
 Professor and Assistant Supervisor of Normal Schools and National Colleges, 1881-84; Inspector of the Normal Schools and National Colleges, 1885-91; Delegate sent by the Minister of Public Instruction to the World's Exposition at Paris in 1889; Principal of the National College of Concepcion del Uruguay, 1892-98; Director of the Section of Education, 1899; Member of the National Board of Education, 1899; Delegate to the Pan-American Exposition from the Province of Entre Rios and General Board of Education of the Province of Corrientes, also Commissioner to Study the Elementary Schools and Adult Evening Schools of the United States, 1901. *Address:* Buenos Ayres, Argentine Republic; *address until January, 1902,* 512 Delavan Ave., Buffalo, N. Y.

UNITED STATES OF BRAZIL

- 1901 ALCIDES MEDRADO.
Address: Care of Legation of the United States of Brazil, Washington, D. C.
 A. FONTOURA XAVIER.
 In Consular Service (various appointments), 1885-97; Consul General from Brazil to the United States, 1897; Plenipotentiary to Universal Postal Congress at Washington, 1901; Delegate to Second Pan-American Congress, Mexico, 1901. *Address:* Rio Janeiro, Brazil; *consular address:* 17 State St., New York, N. Y.

REPUBLIC OF CHILE

- 1901 JULIO PERES CANTO, LL.B., '90.
Secretary of the Society for the Industrial Development of Chile, Santiago, 1891-96; Commissioner of Chile at the Central American Exposition, 1896; Consul General of Chile to the Central American Republics, Guatemala, 1898; Delegate Secretary to the Pan-American Exposition of Buffalo (special commission), 1901. *Consular address:* Guatemala City, Guatemala, C. A.
- CARLOS SILVA CRUZ.
Address: Care of Legation of the Republic of Chile, Washington, D. C.
- GIULLERMO FREUDENBURG CRISTI, Ph.B., '97, B.L., '00, Univ. of Santiago, Chile.
Director and Chief of the School Department, Patronato Santa Filomena, 1896; Commissioner Assistant of Chile to the Pan-American Exposition (educational department); Special Commissioner to Study the Educational Systems in the United States and Europe, 1901. *Address:* Casilla 841, Santiago, Chile; *United States address:* Castle Inn, Niagara Sq., Buffalo, N. Y.

REPUBLIC OF GUATEMALA

- 1901 DR. JOAQUIN YELA.
Physician and Surgeon of the Faculties of Guatemala and San Francisco, Cal.; Founder and ex-Dean at the Guatemalan College of Pharmacy and Medicine; Guatemalan Commissioner to the Paris (1878) and Buffalo Expositions; Delegate to the Second and Third Pan-American Medical Congresses; Member of the Caballeros Hospitallarios Españoles of Madrid, Spain; Member of the Académie Nationale of Paris, France. *Address:* Guatemala City, Guatemala, C. A.; *consular address:* 4 Stone St., New York, N. Y.

REPUBLIC OF NICARAGUA

- 1901 DON ALEJANDRO BERMÚDEZ, M.T., T.E., A.M., '92, Inst. of Granada, Nicaragua.
Professor of Literature, National Institute, Guatemala, 1893; Member Pedagogical Congress of Guatemala; Inspector General of Finance of Nicaragua, 1898; Assistant Secretary of Promotion and Public Works of Nicaragua, 1899; Secretary of Legation of Nicaragua in Washington and Special Commissioner to Pan-American Exposition, 1901. *Address:* Care of Legation of Nicaragua, Washington, D. C.
- DON RAMIRO GAMEZ.
Address: Care of Legation of Nicaragua, Washington, D. C.

REPUBLIC OF COSTA RICA

- 1901 DON JOAQUIN BERNARDO CALVE.
Address: Care of Legation of Costa Rica, Washington, D. C.

LIFE DIRECTORS, LIFE AND ACTIVE MEMBERS

ALABAMA

ACTIVE MEMBERS

- 1882 JULIA S. TUTWILER.
Principal of Alabama Normal College for Girls, Livingston.
- 1888 JOHN HERBERT PHILLIPS, A.M., Marietta Coll., O.; Ph.D., Southern Univ., Ala.
1883, Superintendent of Schools, 231, 7th Ave., Birmingham.
- 1892 FRANCIS MORTON ROOF.
1897, President of Howard College, East Lake.
- 1894 LUCIEN V. LA TASTE.
General Agent, University Publishing Co. of New York; Box 564, Montgomery.
- JOHN MASSEY, A.M., '75, LL.D., '79, Univ. of Ala.
1876, President of Alabama Conference Female College, Tuskegee.
- 1895 MARY A. CAHALAN.
1884, Principal of the Powell School, 311, 4th Ave., Birmingham.
- J. B. CUNNINGHAM.
1898, Principal of High School, 1030 S. 21st St., Birmingham.
- ROBERT ALEXANDER MICKLE, A.B., '86, Davidson Coll., N. C.
Principal, Jefferson St. Primary and Grammar Schools, 101 Georgia Ave., Mobile.
- JAMES K. POWERS, A.M., '73, LL.D., '97, Univ. of Ala.
1901, Representative, B. F. Johnson Publishing Co., Florence.
- JOHN D. YERBY, A.B., '79, Southern Univ.; A.M., '96, Univ. of Ala.
1894, Superintendent of Schools, 996 Government St., Mobile.
- 1897 ALABAMA POLYTECHNIC INSTITUTE.
President, William Le Roy Broun; Librarian, Charles C. Thach, Auburn.
- 1898 ROBERT VENABLE ALLGOOD, B.Sc., '90, So. Univ., Greensboro; A.M., '93, Univ. of Nashville.
1894, Superintendent of Public Schools, 3d Ave. E., Avondale, Birmingham.
- CHARLES A. BROWN, C.E., A. & M. Coll. of Ala.
1897, Principal of Henley School, 2130, 6th Ave., Birmingham.
- J. F. ELLIOTT.
1900, Superintendent of Schools at Brookwood and Searles, Brookwood, Tuscaloosa Co.
- J. D. MATLOCK.
Representative of American Book Co., 2112 N. 7th Ave., Birmingham.
- 1899 STATE NORMAL SCHOOL AT JACKSONVILLE.
President, William Clarence Daugette, Jacksonville.
- 1900 JOHN W. ABERCROMBIE, A.B., '86, Oxford Coll.; LL.B., '88, Univ. of Ala.
1898, Superintendent of Education of Alabama, Department of Education, Montgomery.
- LUCIEN P. GIDDENS.
Greensboro.

ALABAMA—Continued

- 1900 CHARLES B. GLENN, M.Sc., '98, Ala. Polytechnic Inst.; A.B., '96, Harvard.
1899, Principal, Paul Hayne School, 709 S. 20th St., Birmingham.
- WILLARD J. WHEELER.
1896, President, Birmingham Business College, 1909½-1917½, 1st Ave., Birmingham.
- M. C. WILSON, C.E., '76, Univ. of Va.
President, State Normal College, Florence.
- 1901 J. ALEX. MOORE.
Secretary, Alabama Girls' Industrial School, Montevallo.
- H. O. MURFEE, B.Sc., '92, Marion Mil. Inst.; A.B., A.M., '97, Univ. of Va.
Assistant Superintendent and Professor of Physics, Marion Military Institute, Marion.
- JOHN LAKE PARKER.
1900, Member, Board of Education, 1913, 1st Ave., Birmingham.
- MRS. J. H. PHILLIPS.
President, Free Kindergarten Association, Birmingham.

ARIZONA

ACTIVE MEMBERS

- 1898 R. L. LONG.
1899, Superintendent of Public Instruction, Capitol Building, Phoenix.
- BLANCHE TORRENCE THOMAS.
1901, Kindergarten Teacher, San Carlos.
- 1899 FRANK YALE ADAMS, A.B., '88, A.M., '94, St. Lawrence Univ.
1897, Professor of History and Pedagogy, University of Arizona, Tucson.
- WILLIAM J. ANDERSON, B.Sc., '97, National Univ., Chicago.
1899, Territorial Normal School, Tempe; res., S. 12th Ave., Phoenix.
- EDWARD J. BREWSTER.
1901, Principal Teacher, Indian School, Fort Mojave.
- MRS. SIDNEY C. BOTKIN.
Matron of Indian School, Mohave City.
- WILLIAM B. CREAGER, A.B., '95, Ind. State Univ.
1895, Superintendent of City Schools, California Ave., Phoenix.
- A. J. MATTHEWS.
1900, President, Territorial Normal School, Tempe.
- JAMES R. MESKIMONS.
1900, Director of Manual Training, Phoenix Indian Schools, Phoenix.
- M. M. PARKER, A.M., '78, Wesleyan Univ.
1897, President of University of Arizona, Tucson.
- 1900 MILTON J. NEEDHAM.
Principal, Blue Cañon School, Algert.
- 1901 W. W. EWING.
Principal Teacher, Moqui Indian Training School, Keams Cañon.
- S. M. McCOWAN.
1889, Superintendent of Indian School, Phoenix.
- UNIVERSITY OF ARIZONA.
Acting President, F. Yale Adams; Librarian, Howard J. Hall, Tucson.
- HORACE G. WILSON.
1901, Superintendent of Havasupai Indian School, Supai.

ARKANSAS

ACTIVE MEMBERS

- 1887 THOMAS A. FUTRALL, A.M., West Tenn. Coll.; LL.D., '00, Univ. of Ark.
1895, Examiner Public-School Teachers for Lee Co., Marianna.
- 1895 GEORGE B. COOK, A.M.
Superintendent of City Schools, 200 Garden St., Hot Springs.
- J. L. HOLLOWAY, A.M., Mo. St. Nor. Sch.
1889, Superintendent of Schools, 1203 N. 12th St., Fort Smith.
- W. W. RIVERS, A.B., '86, A.M., '89, Univ. of Miss.
1901, President of Central College, Conway.
- 1896 HOWARD GATES.
1891, Principal of Kramer School, Little Rock.
- J. H. HINEMON, A.M.
1894, Superintendent of Schools, 618 W. 6th Ave., Pipe Bluff.
- ALFRED LEE PEACHER, A.M., '92, Wooster Univ., O.
1895, Superintendent of Schools, 806 Broadway, Van Buren.
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- STATE NORMAL SCHOOL AT CHICO.
President, C. C. Van Liew; Librarian, Susan T. Smith, Chico.
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1898, Supervising Principal, City Schools, and (1901) Lecturer in Pedagogy, Yale University, 285 Willow St., New Haven.
- SARAH J. WALTER**,
1895, Principal of Training Department, State Normal School, Willimantic.
- 1899 **ISAAC M. AGARD, A.B.**, '79, A.M., '84, Amherst Coll.
1888, Principal of Rockville High School; Superintendent of East District Graded School, Vernon; res., Rockville.
- WATERMAN RUFUS BURNHAM**,
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- CONNECTICUT AGRICULTURAL COLLEGE**,
President, George W. Flint, Storrs.
- WATSON NICHOLSON, A.B.**, '92, Stanford Univ.; A.M., '95, Harvard.
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CONNECTICUT—*Continued*

- 1899 WILLIAM NORTH RICE, A.B., '65, A.M., '68, Wesleyan; Ph.D., '67, Yale; LL.D., '86, Syracuse.
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1896, Superintendent of Schools, 31 Emmons Pl., New Britain.
- 1901 HANS BALLIN.
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FREE PUBLIC LIBRARY, NEW HAVEN.
Librarian, W. K. Stetson, New Haven.
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1900, Supervisor of Manual Training, Connecticut School for Boys, Meriden.
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Author and Publisher, Newark.
- 1896 A. H. BERLIN, A.M., '88, Hamilton Coll.
1888, Principal of High School, 906 Adams St., Wilmington.
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1889, Commissioner of Education of the United States, 1303 P St., N. W., Washington.
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1900, Assistant Superintendent of Public Schools, 1912, 11th St., N. W., Washington.
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1900, Cataloguer in Library, Bureau of Education, Washington.
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FLORIDA

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- 1893 WILLIAM N. SHEATS, A.B., '73, A.M., '76, Emory Coll., Ga.
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- 1894 MRS. W. SCHLKPFGRELL-KEPPLER.
1893, Principal of Froebel Academy, Main and Monroe Sts., Jacksonville.
- 1895 J. L. HOLLINGSWORTH, A.B., '88, Emory Coll., Oxford, Ga.
1893, County Superintendent of Public Instruction, Bartow.
- 1896 NATHAN BENJAMIN YOUNG, A.B., '88, A.M., '91, Oberlin Coll.
1901, President, State Normal and Industrial College, Tallahassee.
- 1897 DAVID WILLIAMS.
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1898, Professor of Experimental Psychology and Child Study, Florida State College, Tallahassee.
- JOHN B. STETSON UNIVERSITY.
President John F. Forbes, DeLand.
- 1900 BENELLA DAVENPORT.
1900, Department of Latin and Literature, State Normal School, De Funiak Springs.
- W. L. FLOYD, Major, U. S. A., B.Sc., '86, S. Car. Mil. Inst.
Commandant and Professor of Science, East Florida Seminary, Gainesville.
- WILLIAM WILSON FRY.
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1900, Superintendent of Florida School for the Deaf and Blind, St. Augustine.
- NATHAN McCULLOUGH, A.B., Presbyterian Coll., Belfast, Ireland.
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1868, Superintendent of Schools, Chatham Academy, Savannah.

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1892, Principal of Boys' High School, 142 Jackson St., Atlanta.
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President, Rev. Horace Bumstead; Librarian, Miss E. J. Stenabaugh, Atlanta.
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1894, State School Commissioner, Capitol, Atlanta.
- JOSEPH S. STRAWK, A.R., '83, Emory Coll.; A.M., '97, Univ. of Ga.
1897, President of North Georgia Agricultural College, Dahlonega.
- UNIVERSITY OF GEORGIA.
Chancellor, Walter B. Hill; Secretary, J. D. Campbell, Athens.
- 1896 NICHOLAS E. WARE.
1890, Superintendent of Public Schools, Hawkinsville.
- H. C. WHITE, B.Sc., C. & M.E., '70, Ph.D., '87, Univ. of Va., F. C. S.
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1900, Principal of Southern Normal Institute, Douglas.
- L. M. LANDRUM, A.B., '76, Univ. of Ga.
1897, Assistant Superintendent of Schools and Secretary of Board of Education, 105 Smith St., Atlanta.
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1898, Assistant Training Teacher, State Normal and Industrial College, Milledgeville.
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1901, President, Georgia Military Academy, College Park (near Atlanta).
- 1898 ALICE DUGGED CARY.
1901, English Department, Morris Brown College, 47 Bradley St., Atlanta.
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1895, Instructor in English Language and Literature, State Industrial College, College.
- 1899 JAMES C. HARRIS, A.M., '85, Univ. of Ga.
1892, Superintendent of Public Schools, 313, 2d Ave., Rome.
- WALTER B. HILL, A.B., '70, B.L. and A.M., '71, Univ. of Ga.; LL.D., '00, Emory Coll. and S. W. Presbyterian Univ., Clarksville, Tenn.
1899, Chancellor of University of Georgia, University Campus, Athens.
- MERCER UNIVERSITY LIBRARY.
President, P. D. Pollock, Macon.

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1895, Vice-President, South Georgia College, McRae.
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1891, President, State Industrial College, College.
1901 E. A. POUND, A.B., Emory Coll., Oxford, Ga.
1895, Superintendent of Public Schools, Waycross.
JERE M. POUND.
Superintendent of Schools, Office of Board of Education, Macon.
THEODORE TORPEL, M.D., '99, Coll. of Physicians and Surgeons, Atlanta.
1899, Physical Director, Public Schools, English-American Bldg., Atlanta.

IDAHO

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- 1888 JAMES C. BLACK, Pd.M., '94, Pd.D., '95, School of Pedagogy, Univ. of City of New York.
1897, President of State Normal School, Albion.
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1898, State Superintendent of Public Instruction, Boise.
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1900, Superintendent of Public Schools, Silver City.
J. WALTER JOHNSON.
Superintendent of Public Schools, Caldwell.
JAMES A. MACLEAN, A.B., '92, Univ. of Toronto; A.M., '93, Ph.D., '94, Columbia Univ.
1900, President of the University of Idaho, Moscow.
WALTER R. SIDERS, H.Sc., '91, Fremont Nor. Sch.
1899, Superintendent of City Schools, Pocatello.

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1890 STATE TEACHERS' ASSOCIATION OF ILLINOIS.
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1874, Superintendent of City Schools, Jerseyville.

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1898, President of Eastern Illinois State Normal School, Charleston.
- 1895 JOHN NICHOLS ADKE, Ph.B., '91, Northwestern Univ.
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1900, Superintendent of Public Schools, Odebolt.
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1891, Superintendent of Indian Training School, Toledo.
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T. S. JOHNSON.

1898, Superintendent of City Schools, McPherson.

* Died November 2, 1901.

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1899, State Superintendent of Public Instruction, 213 Topeka Ave., Topeka.
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1891, Superintendent of City Schools, Winfield.
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THOMAS B. HENRY, A.B., '98, Univ. of Kan.
1899, Instructor in Mathematics, Montgomery County High School, Independence.
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KENTUCKY

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1881, Principal of Girls' High School, 426 E. Gray St., Louisville.
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1900, Superintendent of City Schools, 420 White Ave., Owensboro.
- 1893 EDGAR H. MARK.
1894, Superintendent of Schools, Center and Walnut Sts., Louisville.
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1895, Superintendent of Schools, Hopkinsville.
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- ELBRIDGE L. HEATH.
1898, Principal of Ward School, Calumet.
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1898, Superintendent of Public Schools, 1100 E. Porter St., Albion.
- NORTHERN STATE NORMAL SCHOOL.
Principal, Dwight Bryant Waldo, Marquette.
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1901, Director Home Department, Detroit University School, Detroit.
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- 1901 MARGARETHE MARIE ASCHER, A.B., '99, Univ. of Mich.
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- R. B. DEAN, B.Sc., '98, Univ. of Mich.
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Member of Board of Education, 21 N. Union St., Grand Rapids.
- CHARLES T. GRAWN, Pd.M., '97, Mich. St. Nor. Coll.
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- 1901 **WILLIAM H. C. HALE.**
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- CLARK B. HALL.**
1897, Principal of Western High School, 612, 14th Ave., Detroit.
- ALICE LOUISE HARRIS.**
1897, Kindergarten and Primary Supervisor, Calumet.
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1899, Superintendent of Schools, Alma.
- SCHATTUCK O. HARTWELL, A.B., '88, Amherst Coll.**
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- FRED A. JEFFERS.**
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- C. E. PALMERLEE.**
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- P. J. WILSON.**
1900, Superintendent of Schools, 80 Chestnut St., Wyandotte.
- E. A. WREIDT.**
Superintendent of Schools, Clinton.

MICHIGAN—Continued

- 1901 GEORGE S. WRIGHT.
Principal of High School, Luther.
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1899, County Commissioner of Schools, Trenton.

MINNESOTA

LIFE DIRECTOR

- 1870 WILLIAM F. PHELPS, A.M., '52, Union Coll., N. Y.
Resident Director, State Normal School, 318 Chamber of Commerce Building,
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- 1864 CALVIN SMITH PENNELL, A.B., '41, A.M., '50, Colby Univ.
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1890 BOARD OF EDUCATION, Independent School District No. 3, Northfield.
President, A. W. Norton; Clerk, S. Finkelson, Northfield.

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- 1880 D. L. KIEHLE, A.B., '61, A.M., '64, LL.D., '87, Hamilton Coll., N. Y.
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1886 FREDERICK E. STRATTON, A.B., '71, A.M., '74, Williams Coll.; Ph.D., '92, Ill. Wesleyan Univ.
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1890 ROBERT EDUARD DENFELD, A.B., '76, A.M., '78, Amherst Coll.
1885, Superintendent of Schools, Central High School, Duluth.
1893 CHARLES M. JORDAN, Ph.D., '92, Tufts Coll.
1892, Superintendent of Schools, 615 E. 18th St., Minneapolis.
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1895, State Inspector of Graded Schools, 916, 5th St., S. E., Minneapolis.
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1893, State Inspector of High Schools, 1601 University Ave., S. E., Minneapolis.
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1879, Training Teacher in Normal School, 417, 2d Ave., S., St. Cloud.
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1889, Principal of Washington School, Central High School, Duluth.
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1895 JOHN A. HANCOCK, M.L., '90, Univ. of Wis.; A.M., '93, Stanford Univ.
1901, Director of Training Department, State Normal School, 125 Cherry St., Mankato.
*F. V. HUBBARD.
1896, Superintendent of Schools, Red Wing.
GEORGE R. KLEEBERGER.
1895, President of State Normal School, St. Cloud.
IRWEN LEVISTON, A.B., '82, A.M., '88, Dartmouth Coll.
1900, Superintendent of City Schools, New York Life Building; res., 481 Dayton Ave.,
St. Paul.
JESSE F. MILLSPAUGH, A.B., '80, Univ. of Mich.; M.D., '83, Univ. of Pa.
1898, President of State Normal School, 77 E. Fifth St., Winona.
SAMUEL J. RACE, B.L., Univ. of Pa.
1886, Superintendent of Redwood Co. Schools, Redwood Falls.
WAITE A. SHORMAKER, Ph.D., '98, N. Y. Univ.
1899, Superintendent of City Schools, 713, 1st Ave. S., St. Cloud.
JAMES W. STRONG, A.B., '58, A.M., '61, D.D., '72, Beloit Coll.; LL.D., '96, Ill. Coll.
1870, President of Carleton College, 208 College Ave., Northfield.
ADOLPH C. TISBETTS.
1900, Superintendent of Schools, Blue Earth City.
EDMUND J. VERT, Ph.D., '94, Ph.B., '96, Ph.D., '98.
1901, Instructor in Senior English, Central High School, 2306, 10th Ave., S., Minneapolis.
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1899, President of State Normal School, Moorhead.
1896 C. A. BALLARD, B.Sc., '94, Univ. of Minn.
1899, Department of Biological Science, State Normal School, Moorhead.
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1872, Assistant Superintendent of Public Schools, 639 St. Anthony Ave., St. Paul.
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1895, Superintendent of Schools, Marshall.
RALPH H. BURNS, A.B., '95, Yale.
1901, Superintendent of Public Schools, St. James.

* Died August 27, 1901.

- 1896** R. W. CRANSTON.
 1898, Agent for Butler, Sheldon & Co., 1025, 3d Ave., S., Minneapolis.
 JAMES J. DOW, A.B., '74, A.M., '78, L.H.D., '99, Carleton Coll.
 1875, Superintendent of School for the Blind, Faribault.
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 1896, Supervisor of Drawing, Public Schools, Hampshire Arms, Minneapolis.
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 1899, Superintendent of Public Schools, 511 Union Ave., Fergus Falls.
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 1893, Principal of East High School, 1025, 5th St., S. E., Minneapolis.
- 1897** ISAAC I. BARGEN.
 1886, Superintendent of Schools, Mountain Lake.
 WILLIAM A. BARTLETT, B.Sc., '87, A.M., '90, Iowa Coll.
 1896, Principal of High School, 227 W. Sanborn St., Winona.
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 1899, Superintendent of Public Schools, Brown's Valley.
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 1894, Superintendent of Schools, 401 W. 6th St., Faribault.
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 1895, Superintendent of Schools, Fairmont.
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 STATE NORMAL SCHOOL AT MOORHEAD.
 President, Frank A. Weld, Moorhead.
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 President, George R. Kleeberger; Librarian, Gertrude Campbell, St. Cloud.
 STATE NORMAL SCHOOL AT WINONA.
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 1896, Superintendent of Schools, 409 E. 4th St., Winona.
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 1894, Superintendent of Public Schools, New Ulm.
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 DIEDRICH A. GRUSSENDORF, B.Sc., '97, Univ. of Minn.
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 1885, Superintendent of School for Feeble-Minded, Faribault.
 PETE WIKOFF ROSS, B.Sc., A.B., '92, Univ. of Mich.
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President, Cyrus Northrop; Librarian, William W. Folwell, Minneapolis.
- 1901 LOUIS ANDERSON, A.M., '96, Univ. of Minn.
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MISSISSIPPI

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- 1890 JAMES RHEA PRESTON, A.M.
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- 1894 ROBERT B. FULTON, A.B., '69, A.M., '72, Univ. of Miss., LL.D., '53, Univ. of Nashville.
1892, Chancellor of University of Mississippi, University.
- 1895 E. E. BASS, B.L., '83, Univ. of Missouri.
1884, Superintendent of City Schools, 509 N. Broadway, Greenville.
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1893, Superintendent of City Schools, Kosciusko.

MISSOURI

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1895, Superintendent of Schools, 3634 Flad Ave., St. Louis.
- 1886 J. M. GREENWOOD, A.M., '73, LL.D., Univ. of Missouri.
1874, Superintendent of City Schools, 9th and Locust Sts., Kansas City.

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- 1871 JAMES B. MERWIN.
Editor "American School and College Journal," 3609 Palm St., St. Louis.
- 1886 CHARLES HENRY EVANS, A.M., '78, William Jewell Coll., Liberty, Mo.
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1899, Superintendent of City Schools, Brookfield Ave., Brookfield
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MONTANA

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- 1894 JACOB ALBRIGHT SHAWAN, A.B., '80, A.M., '83, Oberlin Coll.; Ph.D. (honorary), '94, Muskingum Coll. 1889, Superintendent of City Schools, 1122 Bryden Road, Columbus.

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1890, Principal of Pennsylvania Institution for the Instruction of the Blind, Overbrook.
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SOUTH CAROLINA

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- 1891 MARTHA SCHOFIELD.
1868, Founder of Schofield Normal and Industrial School for Colored Youth, Aiken.

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- 1895 D. B. JOHNSON, A.B., '77, A.M., '80, Univ. of Tenn., Knoxville.
1895, President of Winthrop College, Rock Hill.
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1895, Superintendent of Schools, Columbia.
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1893, Superintendent of City Schools, Chester.
- 1897 C. A. GRAESER, A.M., '90, Charleston Coll.
1898, Professor of Modern Languages, High School, 6 Glebe St., Charleston.
- 1898 JOHN S. MARQUIS, A.B., '76, A.M., '93, Lafayette Coll., Easton, Pa.
1892, Principal of Brainerd Institute, Box 235, Chester.
- 1899 HENRY P. ARCHER, A.M., '59, Coll. of Charleston.
1885, Superintendent of Instruction, 74 Rutledge Ave., Charleston.
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1890, State Superintendent of Education, 1118 Senate St., Columbia.
A. P. MONTAGUE, A.M., LL.D.
President of Furman University, Greenville.
- W. K. TATE, A.B., '92, A.M., '00, Univ. of Nashville.
1898, Principal of Memminger Normal School, 131 Coming St., Charleston.
- W. B. WILSON.
Charleston.
FRANKLIN COWLES WOODWARD, A.M., '74, Randolph Macon Coll.; Litt.D., Univ. of N. Car.
1897, President of South Carolina College, Columbia.
- 1900 JAMES THOMAS COLEMAN, B.Sc., '86, S. Car. Mil. Acad.
1896, Professor of Physics, South Carolina Military Academy, The Citadel, Charleston.
- R. FERDINAND GILLIAM, A.B., '96, Stanford Univ.
1897, Superintendent of City Schools, and Member County Board of Education, Abbeville.
- EVELYN HOLMES.
1896, Director, South Carolina Kindergarten Association Training School, 141 Rutledge Ave., Charleston.
- MORRISON A. HOLMES.
1887, Principal, Avery Normal Institute, 57 Bull St., Charleston.
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Member, State Board of Education, Graniteville.
- W. ZACH MCGHEE, A.M., '00, S. C. Coll.; Grad., S. C. Mil. Acad.
1899, Clerk in State Department of Education, Capitol, Columbia.

SOUTH CAROLINA—Continued

- 1900 JOHN OGREN.
Member, Board of Education, 529 King St., Charleston.
- CLARENCE J. OWENS, A.M., Columbian Univ.
1895, President, Orangeburg College, cor. Broughton and Glover Sts., Orangeburg.
- A. L. STOKES.
1900, Principal, Richmond Business College, 399 King St., Charleston.
- H. A. C. WALKER, A.B., '97, Wofford Coll., S. C.
1899, Principal, Graded School, Summerton.
- PATTERSON WARDLAW, A.B., '80, Erskine Coll.
1894, Professor of Pedagogy, South Carolina College, 831 Sumter St., Columbia.
- 1901 WINTHROP NORMAL AND INDUSTRIAL COLLEGE.
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- 1875 FAYETTE L. COOK.
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- 1890 WILLIAM H. H. BEADLE, A.B., '61, A.M., '64, LL.B., '67, Univ. of Mich.
1889, President of State Normal School, Madison.
- 1893 A. WELLINGTON NORTON, A.B., '73, A.M., '76, LL.D., '00, Univ. of Rochester.
1899, President of Sioux Falls College, Sioux Falls.
- 1894 MATTIE JONES.
1896, Teacher in Indian Industrial School, Flandreau.
- KATE TAUBMAN, B.Didac., Iowa St. Nor. Sch.
1900, Principal of High School, 305 Adams Block, Deadwood.
- 1895 FRANK CRANE, A.M., Gale Coll.
Pierre.
- ANNA B. HERRIG, Grad., Oswego Nor. Sch., N. Y.
1898, Superintendent, Training Department, State Normal School, Madison.
- GEORGE M. SMITH, A.B., '73, A.M., '77, Colby Univ.
1891, Professor of Modern Languages, Literature, and Pedagogy, University of South Dakota, Vermillion.
- 897 ALEXANDER STRACHAN, A.B., '80, A.M., '82, Univ. of Rochester, N. Y.
1890, Superintendent of Schools, 71 Forest Ave., Deadwood.
- E. E. COLLINS.
Superintendent of Public Instruction, Vermillion.
- WILLIAM W. GIRTON, Grad., '74, St. Nor. Sch., Platteville, Wis.
1901, Acting President State Normal School, Washington Ave., Madison.
- IDA P. HATCH.
Ex-Superintendent of City Schools, Pierre.
- G. L. PIGG, A.B., '73, Berea Coll., Ky.
Superintendent of W. S. Indian School, Crow Creek.
- SOUTH DAKOTA AGRICULTURAL COLLEGE.
President, J. W. Heston, Brookings.
- 1900 C. W. MARTINDALE, A.M., '86, Drake Univ.
1899, Superintendent of Schools, 410 Capitol St., Yankton.
- 1901 MINA H. AASVED.
Principal of School, Bristol.
- WILLIAM H. BARTEN.
1893, Teacher in Day School No. 21, Pine Ridge Agency, Allen.
- JOHN B. BROWN, M.Sc., '93, Kan. Agri. Coll.
1900, Superintendent of Indian School, Pine Ridge.
- JOHN F. CARSON.
Teacher in Day School, Cheyenne River Agency, Leslie.
- CLAUDE C. COVEY.
Teacher in No. 31 Day School, Pine Ridge Agency; res., Merriman, Neb.
- SIVERT A. JORDAHL, B.L., '98, Univ. of Minn.
Teacher in Lutheran Normal School, Sioux Falls.
- J. W. LEWIS.
1897, Teacher in Day School, Pine Ridge.
- MRS. NELLIE B. MCCLELLAND, B.Sc., '90, Amity Coll., College Springs, Ia.
1898, Teacher in First Primary, Public Schools, Sturgis.
- J. A. McLOUTH, Ph.B., '92, Hillsdale Coll., Mich.
1901, Superintendent of Schools, Bon Homme County, Springfield.
- HELEN S. PEABODY.
1885, Principal of All Saints School, Sioux Falls.
- RILLA A. PETTIS.
1900, Teacher in Indian School, Rapid City.
- W. H. ROSS.
1900, Disciplinarian, Indian Boarding School, Rosebud.
- G. J. SCHELLENGER.
Deputy State Superintendent of Public Instruction, Pierre.
- MISS E. O. STILWELL.
Matron, Indian School, Rapid City.
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1898, Housekeeper, No. 29 Day School, Pine Ridge Agency, Kyle.
- AGNES B. YOUNG.
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TENNESSEE

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1895, Professor of American History, Peabody Nor. Coll., 920 S. Summer St., Nashville.
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Founder and Organizer of Clara Conway Institute, Memphis, Tenn., Nashville.

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1885, Principal of Girls' High School, 508 Broad St., Knoxville.
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1893, Superintendent of City Schools, 1001 E. 9th St., Chattanooga.
- RICHARD JONES, A.M., '81, Iowa Coll.; Ph.D., '93, Heidelberg, Germany.
1898, Professor of Literature, Vanderbilt University, Nashville.
- 1896 JAMES A. HENRY, A.B., '83, Atlanta Univ.
1886, Principal of Howard High School, 207 Grove St., Chattanooga.
- 1897 J. H. McCALLIE, B.Sc., Grant Univ.
Superintendent of Schools, 425 Vine St., Knoxville.
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Agent for American Book Co., Broad and Spruce Sts., Nashville.
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1887, President of University of Tennessee, Knoxville.
- MARCUS M. ROSS.
1886, Principal of State Normal School, Fairmont Ave., Fairmont, Va.; home address, Nashville.
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- 1900 JAMES N. ANDERSON, A.M., '87, Univ. of Va.; Ph.D., '94, Johns Hopkins Univ.
1900, Instructor in Latin, Vanderbilt University, 1006 Lamar St., Nashville.
- Z. H. BROWN.
1900, Superintendent of City Schools, 1816 West End Ave., Nashville.
- MRS. E. G. BUFORD.
1885, President of "The Academy," 829 Madison St., Clarksville.
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- GEORGE W. GORDON, B.Sc., '59, Univ. of Nashville, Tenn.
1892, Superintendent of City Schools, 280, 2d St., Memphis.
- FOSTER H. IRONS, '99, Adv. Diploma Tchrs. Coll., Columbia Univ.
1900, Supervisor of Manual Training, City Schools, Nashville.
- ISRAEL HYMAN PERES, A.B., '80, A.M., '99, LL.B., '91, Yale.
Member, Board of Education, 68 Equitable Building, Memphis.
- J. M. STEEN.
Member of School Board, 326 Rayburn Ave., Memphis.
- EUGENE F. TURNER.
Principal of Fall Grammar School, 834 Meridian St., Nashville.
- 1901 MEDORA V. GLASE.
1897, Teacher in City High School, 1309 W. Broad St., Nashville.
- UNIVERSITY OF TENNESSEE, LIBRARY.
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- 1874 ALEXANDER HOGG, A.M., '57, Randolph-Macon Coll.; '74, William and Mary Coll.; '89, Univ. of Ala.
1900, Editor of "Texas and Pacific Quarterly," 303 Lamar St., Fort Worth.
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1891, Principal of Sam. Houston Normal Institute, Huntsville.
- 1894 OSCAR HENRY COOPER, A.B., '72, Yale; A.M., LL.D., '91, Univ. of Nashville.
1899, President of Baylor University, 1435 S. 8th St., Waco.
- A. H. WILKINS.
Representative of American Book Co., 418 Main St., Dallas.
- 1895 DAVID SHIRES BODENHAMER.
1885, Professor of Mathematics, Trinity University, Tehuacana.
- J. M. FENDLEY, A.B., '82, Univ. of Nashville.
1885, County Superintendent and Principal of Avenue L School, 3202 Ave. N, Galveston.
- T. G. HARRIS, A.B., '76, A.M., '80, Carson Coll., Tenn.
1895, Superintendent of Schools, Austin.
- W. S. SUTTON, A.B., '78, A.M., '84, Univ. of Ark.
1897, Professor of Pedagogy, University of Texas, 1812 Congress Ave., Austin.
- 1896 J. L. LONG.
1893, Superintendent of City Schools, High School, Dallas.
- 1897 CHARLES T. ALEXANDER.
1900, Southern Manager, Maynard, Merrill & Co., 1122 Columbia St., Waco.
- N. J. CLANCY, Grad., St. Nor. Sch.
1901, Principal of High School, Alvarado, Johnson Co.
- C. E. FOSTER, B.Sc., E. Tex. Nor.
1898, Principal of Public Schools, Handley.
- 1896 J. K. MCBRIDE, L.I., Peabody Nor. Coll.; A.B., '93, Univ. of Nashville.
1900, Principal of Wieland Public School, Lone Oak.
- UNIVERSITY OF TEXAS.
President, William L. Prather; Librarian, Benjamin Wyche, Austin.
- 1899 J. E. SMITH.
1885, Superintendent of Schools, City Hall, San Antonio.
- 1900 EDWARD LEVOISIER BLACKSHEAR, A.B., '81, Tabor Coll., Ia.
1896, Principal of State Normal and Industrial College, Prairie View.

TEXAS—Continued

- 1901 W. W. BARNETT, B.Sc., '86, Nor. Nor. Univ.
Superintendent of Public Schools, High School, Houston.
FULTON N. LOVETT.
1901, First Assistant, Public School, Cold Springs; express office, Shepherd.
WILLIAM L. PRATHER, B.L., '71, LL.D., '00, Washington and Lee Univ.; LL.D., '01, Univ. of Pa.
1899, President of University of Texas, 1914 Nueces St., Austin.

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- 1895 WILLIAM JASPER KEER, B.Sc., D.Sc.
1900, President of Agricultural College of Utah, Logan.
UNIVERSITY OF UTAH.
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1897 ROSALIE POLLOCK.
1901, Supervisor of Primary Schools, 25 S. 7th, East, St., Salt Lake City.
1898 BRIGHAM YOUNG COLLEGE.
President, James H. Linford, Logan.
1899 J. L. BROWN, B.Ed., B.Sc., '07, Univ. of Mich.
1897, Superintendent of Public Schools, Utah Co., Pleasant Grove.
SUSAN G. STOKES, A.B., '06, Stanford Univ.
1896, Instructor in Biology, High School, Salt Lake City.
1901 GEORGE A. EATON, A.B., A.M., '02, Harvard Univ.
Principal of High School, University Club, Salt Lake City.
MRS. FRANC R. ELLIOTT, A.B., B.Sc., Iowa Wes. Univ.
Supervisor of Drawing, Roland Hall, Salt Lake City.
E. A. FARRINGTON, A.B., '86, Oberlin Coll.
1900, Instructor of Science and Mathematics, Gordon Academy, 25 Union Ave., Salt Lake City.
MARY C. MAY.
Director of Kindergarten, State Normal School, 635 E. 1st, South, St., Salt Lake City.

VERMONT

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- 1898 JOHN L. ALGER, A.B., '00, A.M., '05, Brown Univ.
1900, Principal of State Normal School, Johnson.
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1896, Principal of St. Johnsbury Academy, 1 Main St., St. Johnsbury.
WALTER E. RANGER, A.B., '79, A.M., '83, Bates Coll.
1900, State Superintendent of Education, Montpelier.
ISAAC THOMAS, A.B., '81, A.M., '84, Yale.
1898, Principal of Edmunds High School, 407 College St., Burlington.
1900 AMY M. BURT, Ph.B., '00, Univ. of Vt.
1900, Assistant in High School, Brown Ave., St. Albans.
WILLARD A. FRASIER.
1895, Superintendent of Schools, 138 Church St., Rutland.
1901 ARTHUR C. COLE, A.B., '04, Olivet Coll., Mich.
1898, Principal of Craftsbury Academy, North Craftsbury.
FRANK P. DAVISON.
Superintendent and Principal of Graded Schools, North Bennington.
MARSHALL WAKE DOWNING, A.B., '04, Oberlin Coll.
Principal of High School, Bellows Falls.
CHARLES H. DUNTON, A.B., '70, Univ. of Vt.; D.D., '87, Syracuse Univ.
1877, Principal of Troy Conference Academy, Poultney.
PHILIP R. LEAVENWORTH, A.B., '02, Yale Univ.
1897, Principal of State Normal School, Castleton.
UNIVERSITY OF VERMONT, LIBRARY.
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VIRGINIA

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- 1889 GEORGE J. RAMSEY, A.M., '80, Hampden Sidney Coll., Va.; LL.D., '98, Southwestern Presbyterian Univ.
1900, Editor-in-Chief, B. F. Johnson Publishing Co., 905 Main St., Richmond.
1894 JOHN H. BADER, A.B., '85, Washington and Lee Univ.
1893, Superintendent of Public Schools, Staunton.
WILLIAM F. FOX, A.M., '58, Richmond Coll.
1889, Superintendent of Schools, City Hall, Richmond.
EDWARD C. GLASS.
1893, Superintendent of Schools, 622 Madison St., Lynchburg.
1896 ALBERT H. TUTTLE, B.Sc., '68, State Coll. of Pa.
1888, Professor of Biology, University of Virginia, 1 West Lawn, Charlottesville.
1897 CELESTIA S. PARRISH, Ph.B., '06, Cornell Univ.
1893, Professor of Philosophy in Randolph Macon Woman's College, Lynchburg.
GEORGE C. SHEPARD.
1890, Principal of Fairfax Hall, 112 Market St., Winchester.
1898 MAURICE M. LYNCH.
1886, Superintendent of Schools, Frederick Co., 12 Rouss Ave., Winchester.
JOSEPH W. SOUTHWALL.
State Superintendent of Public Instruction, Richmond.
1899 EDWARD BELL FISHBURN, JR., B.Sc., '93, S. C. Mil. Acad.; Ph.B., A.M., '98, Ill. Wes. Univ.
1899, President, Hoge Memorial Military Academy, Blackstone.

VIRGINIA—Continued

- 1899 THE HAMPTON NORMAL AND AGRICULTURAL INSTITUTE.
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NATHANIEL COOPER STARKER, Grad., '89, Va. Military Inst.; Ph.B., Univ. of N. Car.
1901, Principal of the The Virginia High School, Suffolk.
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President, Robert Frazer, Farmville.
1900 REV. H. B. FRISSELL, D.D., '00, Harvard.
1893, Principal, Hampton Normal and Agricultural Institute, Box 10, Hampton.
W. H. KRISTER.
Principal of High School, Harrisonburg.
J. A. MCGILVERAY.
1892, Editor of "Virginia School Journal," Richmond.

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- 1886 J. H. MILLER.
1900, Principal, State Normal School, Cheney.
1891 JOHN HULL, A.M., '76, Ill. Wes. Univ.
President of the Reveille Publishing Co., Whatcom.

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- 1890 WILLIAM EDWARD WILSON, A.M., '75, Monmouth Coll., Ill.
1898, Principal of Washington State Normal School, Ellensburg.
1891 FRANK J. BARNARD.
1901, Representative of American Book Co., Room 501, Pioneer Building, Seattle.
1894 FRANK B. COOPER.
1901, Superintendent of City Schools, 7th and Marion Sts., Seattle.
1895 JOHN T. FORREST, Ph.B., '83, Central Univ. of Iowa.
1899, Department of Mathematics, State Normal School, 586 Gardner St., New Whatcom.
D. E. SANDERS, A.M., '97, Kan. Nor. Coll., Ft. Scott.
1900, Psychology and Pedagogy, State Normal School, Cheney.
1896 REUBEN S. BINGHAM, A.B., A.M., Hamilton Coll.
1896, Superintendent of City Schools, 616 Tacoma Ave., Tacoma.
CHARLES FRANCIS REEVES, B.Sc., '78, M.Sc., '81, Pa. St. Coll.
1894, Professor of German, and, 1898, Dean of College of Liberal Arts, University of Washington, Seattle; res., Latona.
JOHN F. SAYLOR, B.Sc., '82, Iowa Agri. Coll.
1899, Superintendent of City Schools, 527 S. Howard St., Spokane.
ALBERT HENRY YODER, A.B., '93, Ind. Univ.
1900, Editor of "Journal of Childhood and Adolescence," and, 1901, Professor of Pedagogy, University of Washington, Seattle.
1897 WASHINGTON STATE NORMAL SCHOOL AT ELLENSBURG.
Principal, W. E. Wilson, Ellensburg.
1898 GEORGE LANCASTER, Ph.B., Wes. Univ., Ill.
1899, Instructor in Mathematics in High School, Everett.
UNIVERSITY OF WASHINGTON.
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1895, Principal of Bryant School, 704 S. I St., Tacoma.
1899 F. F. AVERY.
1890, Superintendent, Fort Spokane Indian Boarding School, Miles.
J. H. MORGAN, A.M., '79, Furman Univ.
1893, Vice-Principal of State Normal School, Ellensburg.
ERNEST RISTE.
1901, Principa of Public and High Schools, Cheney.
CHARLES S. TILTON, B.Pd., '01, Vashon Coll., Wash.
1900, Principal of Ross School, Seattle.
JESSIE B. WILCOX.
1898, Principal of Training School, State Normal School, Ellensburg.
1900 WHATCOM STATE NORMAL SCHOOL.
Principal, E. T. Mathes, Whatcom.
1901 W. E. ALLEN, B.L., '98, Earlham Coll., Richmond, Ind.
1900, Teacher of Botany, High School, care of Y. M. C. A., Spokane.
IDA AGNES BAKER, B.Sc., '78, A.M., '82, Central Univ., Pella, Ia.
1899, Instructor in Latin and Mathematics, State Normal School, 2208 Utter St., Whatcom.
J. N. BOWMAN, A.B., '96, Heidelberg Univ., Tiffin, O.; A.M., Ph.D., '00, Heidelberg, Germany.
1901, Professor of History, State Normal School, Seahome Hotel, Whatcom.
CHARLES M. SHERMAN, Ph.B., '94, A.M., Ph.D., '95.
1901, Superintendent of Schools, Snohomish.
WHITMAN COLLEGE.
President, Stephen B. L. Penrose, Walla Walla, Wash.
C. N. YOUNG.
1891, Principal of Ward School, 812 N. L St., Tacoma.

WEST VIRGINIA

LIFE DIRECTOR

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Glenville.

LIFE MEMBER

- 1870 WILLIAM H. COLE, A.B., A.M., Ohio Wes. Univ.
1898, Superintendent of Public Schools, 933, 3d Ave., Huntington.

WEST VIRGINIA—Continued

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- 1880 W. H. ANDERSON, A.M., '80, Bethany Coll.
1885, Superintendent of Schools, 45, 14th St., Wheeling.
- 1891 J. WALTER BARNES, A.M., W. Va. Univ.
1892, Principal of State Normal School, Fairmont.
- BYRD PRILLERMAN, B.Sc., '80, Knoxville Coll.; A.M., '94, Westminster Coll.
1895, Professor of English Language, West Virginia Colored Institute, Institute.
- 1894 ROBERT A. ARMSTRONG, A.B., '86, A.M., '89, W. Va. Univ.
355 Main St., Clarksburg.
- 1896 J. N. DEAN, A.B., '93, Harvard; A.M., '99, Columbia Univ.
1901, Assistant Professor of Pedagogy, West Virginia University, Morgantown.
- LUCY ROBINSON.
Supervisor of Music, 112 S. Front St., Wheeling.
- DORA B. ROGERS.
Assistant Principal of High School, 1323 Market St., Parkersburg.
- 1897 J. R. TROTTER, A.B., '90, A.M., '96, Harvard.
State Superintendent of Free Schools, Charleston.
- 1898 CHARLES H. COLE, A.B., '82, A.M., '97, Univ. of Mich.
1897, Superintendent of Schools, 119 N. Raleigh St., Martinsburg.
- 1899 WEST VIRGINIA UNIVERSITY.
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- 1900 W. C. MILLER, B.L., '93, Univ. of Nashville.
Teacher of Science, State Normal School, Fairmont.
- STATE NORMAL SCHOOL, WEST LIBERTY.
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- H. B. WORK, A.B., '93, A.M., '96, Wooster Univ., O.
1897, Principal of High School, 70 S. Penn St., Wheeling.
- 1901 W. M. BLAIR, Ph.D., Salem Coll., W. Va.
Principal of the Normal Department, Salem College, Salem.
- M. E. HESS, A.M., '96, Waynesburg Coll., Pa.
1899, Superintendent of Schools, 317 Wells St., Sistersville.
- T. FRANCIS KEMPER.
Department of Mathematics, Salem College, Salem.
- PUBLIC LIBRARY, WHEELING.
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- 1884 ALUMNI ASSOCIATION, STATE NORMAL SCHOOL AT MILWAUKEE.
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- ATHENÆUM SOCIETY OF STATE NORMAL SCHOOL AT PLATTEVILLE.
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Ex-Professor of Law, University of Wisconsin, 315 Wisconsin Ave., Madison.
- WILLARD H. CHANDLER.
Ex-State Inspector of High Schools, Sun Prairie.
- LEWIS HERBERT CLARK.
1892, Professor of Mathematics, State Normal School, River Falls.
- COUNTY TEACHERS' ASSOCIATION, MILWAUKEE COUNTY.
President, Herbert J. Piper, 712 Astor St., Milwaukee.
- PHILIP EDEN, Ph.B., '72, Univ. of Wis.
601 Pine St., Platteville.
- JOHN Q. EMERY, A.M., Ph.B.
1899, State Normal School Regent, Albion.
- LORENZO DOW HARVEY, Ph.D., '91, Milton Coll.
1898, State Superintendent of Public Instruction, Capitol, Madison.
- ANDREW J. HUTTON.
1879, Institute Conductor, State Normal School, 1105 Main St., Whitewater.
- CHARLES H. NYE.
1893, Superintendent of Schools of Grant County, 212 N. Adams St., Lancaster.
- W. D. PARKER, A.M., Univ. of Wis.
1899, State Inspector of Free High Schools, 133 E. Gorham St., Madison.

- 1884 JOHN BARBER PARKINSON, A.B., '60, A.M., '63, Univ. of Wis.
1885, Vice-President, and, 1893, Professor of Constitutional and International Law, University of Wisconsin, 803 State St., Madison.
- PHILADELPHIAN SOCIETY OF STATE NORMAL SCHOOL AT PLATTEVILLE.
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Superintendent, H. C. Buell; Secretary, Lizzie A. Paterson, Janesville.
- SAMUEL SHAW, A.M., '75, Univ. of Wis.
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Bellis, Wm., Mich., '01
Belman, W. C., Ind., '95
Beloit Sch. Board, Wis., '84
Bender, Ida C., N. Y., '95
Benedict, J. C., N. Y., '01
Benedict, W. H., N. Y., '92

- *Benham, N. L., N. Y., '95
 Benner, Henry, Mich., 'or
 Bennett, Chas. A., Ill., '96
Bennett, C. W., Ohio, '84
 Bennett, Mrs. Lydia A., N. J., '96
 Bennett, Myron E., Me., 'or
 Benson, B. K., Ga., '00
 Benson, Christine, Cal., '97
 Benton, Geo. W., Ind., '94
 Bergey, D. H., Pa., '98
 Berkaw, Geo. R., Mich., 'or
 Berlin, A. H., Del., '96
 Bernstein, Nathan, Neb., '00
 Berringer, E. J., Ariz., '99
 Berry, B. D., Ill., '95
 Berry, W. T., Ky., '98
 Bessey, Chas. E., Neb., '95
 Betts, Alice L., Ohio, 'or
 Bevans, Homer, Ill., '97
Bicknell, Thos. W., R. I., '84
 Bierly, H. Elmer, Fla., '99
 Bigelow, Anson H., Iowa, 'or
 Billingsly, J. J., Iowa, '95
 Bingham, Cornelia D., Ill., '00
 Bingham, Reuben S., Wash., '96
Bingham, Robt., N. C., '84
 Birchard, C. C., Mass., '95
 Bishop, Eliza A., Pa., '92
 Bishop, J. Remsen, Ohio, '94
 Bishop, Nathan L., Conn., '95
 Bissell, Annie M., N. Y., '95
 Bixler, W. S., Ill., '00
 Black, C. C., Ark., 'or
 Black, Jas. C., Idaho, '88
 Black, S. T., Cal., '95
 Black, Wm. H., Mo., '95
 Blackshear, E. L., Tex., '00
 Blair, Francis G., Ill., '99
 Blair, John J., N. C., '95
 Blair, W. M., W. Va., 'or
 Blake, Mrs. E. M., Ark., '98
 Blaker, Mrs. E. A., Ind., '96
 Blakesley, O. J., Colo., '96
 Blakiston, Mary, Ohio, '95
 Blewett, Ben, Mo., '97
 Bliss, Fred. L., Mich., '95
 Bliss, J. J., Ohio, '96
 Block, Louis J., Ill., '99
 Block, W. H., Ohio, 'or
 Blodgett, A. H., N. Y., '99
 Bloom, La Fayette, Ohio, '00
B. of Ed., Abilene, Kan., '86
B. of Ed., Beloit, Wis., '84
B. of Ed., Dodge City, Kan., '86
B. of Ed., Jansville, Wis., '84
B. of Ed., La Crosse, Wis., '84
B. of Ed., Milwaukee, Wis., '84
B. of Ed., Nashville, Tenn., '89
B. of Ed., Northfield, Minn., '90
B. of Ed., Oshkosh, Wis., '84
B. of Ed., Ottawa, Kan., '86
B. of Ed., Sedgewick, Kan., '86
B. of Regents, St. Nor. Sch., Wis., '84
 Bodenhamer, D. S., Tex., '95
 Bodler, Anna, N. J., '98
 Bodwell, Edwin J., Neb., '95
 Boice, H. B., N. J., '96
 Bolenbaugh, G. H., Ohio, '96
 Bolton, Frederick E., Iowa, '00
 Boltwood, H. L., Ill., '99
 Bond, G. G., Ga., '94
 Bond, J. D., Minn., '96
 Bonebrake, Lewis D., Ohio, '90
 Bookmyer, T. W., Ohio, 'or
 Boone, Richard G., Ohio, '84
 Booth, F. W., Pa., '00
 Boston College, Mass., '97
 Bostwick, O. P., Iowa, '90
 Botkin, Mrs. Sidney C., Ariz., '99
 Boutelle, C. M., Minn., '96
 Bouton, Eugene, Mass., '95
 Bowers, H. W., Ind., '96
 Bowles, J. J., Mo., '00
 Bowman, G. L., Wis., '95
 Bowman, J. N., Wash., 'or
 Boyd, David R., Okla., '92
 Boyd, Mrs. Gaston, Kan., '97
 Boyd, G. F., Miss., 'or
 Boyd, W. W., Ohio, '94
 Boyden, Albert G., Mass., '90
 Boyden, Arthur C., '90
 Boyden, Wallace C., Mass., '96
 Boyle, Chas. A., Kan., '97
 Boynton, F. D., N. Y., 'or
 Bracelin, Gertrude, Mich., 'or
 Bradley, Chas. A., Colo., '93
 Bradley, John E., Mass., '90
 Bradley, Milton, Mass., '92
 Bradner, Elbert, Ind., 'or
 Bradner, J. W., Ky., 'or
 Brandegee, J. E., N. Y., '96
 Brandt, F. B., Pa., '97
 Bricker, Jas. I., Mich., 'or
 Brier, Warren J., Wis., '95
 Briggs, R. D., Mich., 'or
 Brigham Young Coll., Utah, '98
 Bright, O. T., Ill., '93
 Bristol, E. N., N. Y., '96
 Brittain, M. L., Ga., '00
 Brock, H. Z., Mich., '97
 Brockett, Zue H., D. C., '98
 Broderick, Kate G., N. Y., '96
 Brooks, C. J., Ohio, 'or
Brooks, Edw., Pa., '76
 Brooks, Sarah C., Minn., '94
 Brooks, Stratton D., Ill., 'or
 Brown, C. E., Wis., '95
 Brown, C. A., Ala., '98
 Brown, Claude, Ill., '00
 Brown, Cora S., Ind., 'or
 Brown, Edwin N., Mich., 'or
 Brown, Elias, D. C., '98
 Brown, Eliz. V., D. C., '98
 Brown, Ellis W., D. C., '98
 Brown, Elmer E., Cal., '97
 Brown, Eugene, Iowa, '97
Brown, Geo. P., Ill., '80
 Brown, Geo. W., Mass., '96
 Brown, H. B., Ind., '95
 Brown, Henry E., Ill., 'or
 Brown, Hugh, Mich., '98
 Brown, J. B., S. D., 'or
 Brown, J. L., Utah, '99
 Brown, John A., N. H., '99
 Brown, John F., Iowa, '96
 Brown, J. Stanley, Ill., '97
 Brown, Kate L., Neb., '97
 Brown, Marion, La., '89
 Brown, R. A., Ohio, 'or
 Brown Univ. Library, R. I., 'or
 Brown, Wm. O., Wis., '00
 Brown, Z. H., Tenn., '96
 Brownell, H. G., Ky., 'or
 Bruce, Wm. G., Wis., '93
 Brumbaugh, G. W., Ohio, '96
 Brumbaugh, M. G., P. R., '93
 Bruot, Marie L., Ohio, '96
 Bryan, Wm. J. S., Mo., '99
 Bryan, Wm. L., Ind., '93
 Bryant, Miss C. L., Mo., '99
 Bryant, Forrest B., Ohio, 'or
 Bryn Mawr Coll., Pa., '99
 Bryson Library, Teachers Coll., N. Y., '98
 Buchanan, Elizabeth, Mo., '00
 Buchanan, Geo. V., Mo., '94
 Buchanan, John T., N. Y., '90
 Buchanan, L. A., Cal., '99
 Buchholz, L. W., Fla., '98
 Buckland, B. J., Minn., 'or
 Budd, Mrs. Nellie M., Minn., 'or
 Buechele, J. L., Iowa, '97
 Buehrle, R. K., Pa., '92
 Buffalo Pub. Library, N. Y., '99
 Buford, Mrs. F. G., Tenn., '00
 Rugbee, Percy L., N. Y., 'or
 Bulkley, Julia E., Ill., '95
 Bunnell, C., Ind., '99
 Burch, Arthur, Wis., '96
 Burdick, A. Hall, N. Y., '92
 Burgess, I. B., Ill., '99
 Burk, Fred L., Cal., '92
 Burke, Mrs. B. Ellen, N. Y., '94
 Burke, J. E., Mass., '95
 Burks, J. D., N. Y., '99
 Burnham, Ernest, Mich., 'or
 Burnham, Smith, Pa., 'or
 Burnham, W. R., Conn., '99
 Burns, G. W., Ohio, '00
Burns, J. J., Ohio, '80
 Burns, Ralph H., Minn., '96
 Burris, Wm. P., N. Y., '95
 Burroughs, Geo. S., Ohio, '95
 Burt, Amy M., Vt., '00
 Burton, R. W., Ill., '96
 Busby, Isaac V., Ind., '96
 Bushnell, H. T., Iowa, '97
 Butler College, Ind., '00
Butler, Nicholas M., N. Y., '85
 Butte Free Pub. Lib., Mont., '00
 Butten, Wm. J., Ill., '95
 Butts, Mrs. Annice E. B., Ill., '96
 Buzzell, Delos, Ill., '97
 Byington, S. Lillian, H. I., '95
 Cahalan, Mary A., Ala., '95
 Caldwell, B. C., La., '96
 Caldwell, B. H., Ark., 'or
 Caldwell, H. W., Neb., '96
 Caldwell, J. H., Ark., 'or
 Calkins, F. L., Ill., '95
 Call, A. D., Mass., '96
 Cammack, Ira I., Mo., '95
 Camp, David N., Conn., '92
 Campbell, A. A., Ind., 'or
Campbell, A. G., Kan., '86
 Campbell, Julia, Wis., '97
 Campbell, W. H., Ill., '95
Campbell, James H., N. Y., '84
 Cannon, Geo. L., Colo., '95
 Cannon, Miss H. D., Ore., '99
 Capen, Elmer H., Mass., '96
 Cardiff Free Public Libraries, Wales, '00
 Carey, C. E., Ohio, '95
 Carley, J. H., Mass., '97
 Cargo, R. M., Pa., '96
 Carleton, E. A., Mont., '97
 Carlisle, Ellor E., Mass., '00
 Carmen, Geo. N., Ill., '00
 Carnegie, J. A., Ind., '95
 Carnegie Lib., Allegheny, Pa., 'or
 Carnegie Lib., Pittsburg, Pa., '99
 Carpenter, E. A., Mich., 'or
 Carpenter, Ellen W., Ill., 'or
 Carpenter, Estelle, Cal., 'or
Carpenter, J. H., Wis., '84
 Carr, J. M., Ohio, '97
 Carr, J. W., Ind., '97
 Carrington, W. T., Mo., '99
 Carroll, C. F., Mass., '95
 Carroll, Mary H., N. Y., '98
 Carson, C. H., Jr., La., 'or
 Carson, John F. S. D., 'or
 Carter, A. H., Ark., 'or
 Carter, Joseph, Ill., '99
 Cary, Alice D., Ga., '98
 Cary, C. P., Wis., '97
 Case, Richard, N. J., '94
 Casey, W. V., Colo., '95
 Cassilly, Francis B., Ill., '99
 Castle, E. H., N. Y., 'or
 Cates, E. E., Md., '98
 Catey, Minnie L., Cal., '99
 Caviness, A. L., Neb., 'or
 Cecil, Callie M., Mich., 'or
 Chadsey, Chas. E., Colo., '95
 Chalmers, W. W., Ohio, '95
 Chamberlain, A. H., Cal., '97
 Chambers, Will G., Minn., 'or
 Champlin, Howard, Ohio, '96
 Chancellor, Wm. E., N. J., '00
 Chandler, Anna M., Mich., '99
 Chandler, John W., N. Y., 'or
Chandler, Willard H., Wis., '84
 Chaney, N. H., Ohio, '00
 Chapin, E. P., Mich., 'or
 Chaplain, Alexander, Md., 'or
 Chaplain, Henry L., Ill., '99
 Chapman, F. E., Mass., '94
 Chase, Susan F., N. Y., '98
 Chase, W. J., Ill., '99
 Cheever, W. H., Wis., '96
Cheney, Augustus J., Ill., '84

- Cheney, Francis J., N. Y., '91
Chicago Pub. Library, Ill., '98
Childs, Edward P., Ohio, '01
Church, Geo. E., R. I., '92
Churchill, J. O., Wyo., '97
City Lib'y, Springfield, Mass., '98
Clair, Francis R., N. Y., '94
Clancy, Albert W., Ill., '92
Clancy, N. J., Tex., '97
Clark, Esther A., Neb., '01
Clark, Frank H., Colo., '86
Clark, F. H., Cal., '99
Clark, Mrs. Ida H., Mich., '00
Clark, Jessie L., Kan., '95
Clark, John S., Mass., '92
Clark, L. H., Wis., '84
Clark, V. S., D. C., '99
Clark, W. A., Neb., '95
Clarke, Elva E., Kan., '94
Clarke, Ernest P., Mich., '01
Clarke, Francis D., Mich., '97
Classen, Mrs. A. W., Cal., '89
Claxton, P. P., N. C., '98
Cleary, P. R., Mich., '01
Clendenen, T. C., Ill., '97
Cleveland Pub. Lib'y, Ohio, '97
Clock, Mrs. D. v. H., Ill., '01
Clum, George V., Ill., '99
Coates, T. C., Ohio, '01
Cobb, Chas. D., N. C., '00
Cobb, Chas. N., N. Y., '94
Cobb, Collier, N. C., '99
Coburn, F. F., Mass., '99
Coburn, Wm. G., Mich., '95
Cochrane, W. E., N. Y., '98
Coddington, A. O., Ill., '93
Coddington, E. A., P. I., '00
Coe, Emily M., N. C., '80
Coffin, C. W. D., N. Y., '00
Cogswell, Francis, Mass., '93
Colby, E. C., N. Y., '96
Cole, Arthur C., Vt., '01
Cole, Chas. H., W. Va., '98
Cole, Chas. W., N. Y., '92
Cole, George F., N. Y., '01
Cole, L. W., Okla., '98
Cole, Wm. H., W. Va., '70
Colegrove, P. P., Minn., '00
Coleman, E. N., Iowa, '98
Coleman, J. T., S. C., '00
Colegrove, C. P., Iowa, '97
College, Agr., of Kan., '97
College, Amherst, Mass., '97
College, Boston, Mass., '97
College, Brig. Young, Utah, '98
College, Bryn Mawr, Pa., '99
College, Butler, Ind., '00
College, Conn. Agri., '99
College, Dickinson, Pa., '99
College, Hendrix, Ark., '97
College, Hillside, Mich., '00
College, Iowa, Grinnell, '00
College, Iowa State, Ames, '01
College, Lincoln, Ill., '97
College, Midland, Kan., '99
College, Mont. State, '99
College of St. Francis Xavier, N. Y., '00
College, Pa. State, '00
College, Pomona, Cal., '99
College, Pritchett, Mo., '00
College, Smith, Mass., '98
College, S. D. Agri., '99
College, Valparaiso, Ind., '97
College, Vassar, N. Y., '98
College, Washash, Ind., '95
College, Wellesley, Mass., '00
College, Wheaton, Ill., '99
College, Whitman, Wash., '01
College, Williams, Mass., '97
College, Woman's, Md., '99
Collins, E. E., S. D., '99
Collins, J. H., Ill., '99
Collins, Mrs. J. H., Ill., '95
Collins, John S., Mo., '97
Collins, Mary T., Ill., '01
Columbia University, N. Y., '95
Comings, Fannie S., N. Y., '95
Comstock, D. Y., Vt., '99
Comstock, E. H., Mich., '01
Comstock, T. B., Cal., '95
Congdon, C. H., Ill., '94
Conkling, W. E., Mich., '96
Conley, Geo. H., Mass., '97
Conn. Agri. College, Conn., '99
Conniff, John R., La., '01
Connelley, C. B., Pa., '01
Conover, W. F., Cal., '01
Converse, F. E., Wis., '97
Conway, Clara, Tenn., '87
Conwell, R. H., Pa., '01
Cook, Albert P., Mich., '01
Cook, Chas. F., Me., '98
Cook, E. H., N. Y., '85
Cook, Elizabeth B., Ill., '96
Cook, F. L., S. D., '75
Cook, Geo. B., Ark., '95
Cook, H. Moreland, N. D., '01
Cook, Ida M., Ill., '99
Cook, Mrs. Jesse W., Pa., '01
Cook, John W., Ill., '90
Cook, Newell, Mich., '01
Cook, Webster, Mich., '01
Cooley, Mrs. A. W., N. D., '96
Cooley, E. G., Ill., '97
Cooley, F. A., Cal., '99
Cooley, F. W., Mich., '95
Cooley, L. C., N. Y., '96
Cooper, Erma E., Mich., '01
Cooper, F. B., Wash., '99
Cooper, F. I., Mass., '93
Cooper, Milton C., Pa., '01
Cooper, O. H., Tex., '94
Coover, N., Kan., '86
Copeland, A. B., Colo., '99
Copeland, Chas. H., Ind., '99
Corbett, H. R., Ill., '90
Corbin, J. C., Ark., '90
Cornell Univ. Library, N. Y., '96
Cornell, Watson, Pa., '96
Corson, O. T., Ohio, '87
Corthell, W. J., Me., '92
Co. Teachers' Assn., Wis., '84
Cottingham, J. M., Mo., '97
Cotton, F. A., Ind., '98
Coulter, Minnie, Cal., '99
Courville, Elizabeth, Mich., '01
Covey, Claude C., S. D., '01
Cowgill, Paul A., Ind., '98
Cowing, Helen H., Ohio, '01
Cox, Edwin B., Ohio, '89
Cox, E. Morris, Cal., '96
Cox, Henry C., Ill., '95
Cox, Jean N., N. J., '97
Cox, Martin L., N. J., '93
Cox, T. L., Ark., '00
Cox, Wm. J. M., Ill., '99
Coy, Emma, Ill., '97
Coy, E. W., Ohio, '83
Crabbe, J. G., Ky., '97
Crabtree, J. W., Neb., '95
Craig, Arthur U. D. C., '99
Craig, Oscar J., Mont., '92
Craig, Wm. B., Iowa, '00
Crane, Mrs. Chas. R., Ill., '97
Crane, F. E., Ohio, '01
Crane, Frank, S. D., '95
Crane, Julia E., N. Y., '95
Crane, Wm. I., Ohio, '99
Cranson, R. W., Minn., '96
Creager, W. B., Ariz., '99
Crissy, I. O., N. Y., '98
Crist, Henry M., N. Y., '96
Critchett, E. T., Minn., '98
Crockett, H. G., Cal., '99
Crockett, May M., Ill., '95
Cronebaugh, C. L., Ohio, '99
Crosby, Miss N., Ind., '91
Crosby, H. E., Iowa, '01
Crosby, W. E., N. Y., '70
Crosier, M. E., Iowa, '95
Cross, J. C., Cal., '99
Crouch, Sarah E., Mo., '95
Crouse, Mrs. J. N., Ill., '93
Crouter, A. L. E., Pa., '00
Cruikshank, Jas., N. Y., '57
Cubberly, E. P., Cal., '94
Culbertson, E. D. Y., Iowa, '95
Culler, J. A., Ohio, '00
Cummins, J. P., Ohio, '00
Cunningham, J. B., Ala., '95
Cunningham, Phoebe, Wis., '01
Curran, Ulysses T., Ohio, '66
Currier, C. F. A., Mass., '00
Currier, E. H., N. Y., '97
Curry, Robert, Pa., '83
Curtis, A. E., Mich., '96
Curtis, Virgil G., Ohio, '92
Curtiss, Fred. A., Conn., '94
Dabney, C. W., Tenn., '99
Dafoe, Geo. Eber, Wis., '97
Dailey, M. E., Cal., '98
Dakin, Mrs. Esse B., Ind., '01
Dana, Penella, Kan., '95
Daniels, J. W., Idaho, '98
Darst, Warren, Ohio, '01
Daveport, Benella, Fla., '00
Davey, Vernon L., N. J., '00
Davidson, Chas. C., Ohio, '80
Davidson, F. P., Cal., '99
Davidson, Wm. M., Kan., '90
Davis, A. J., Pa., '98
Davis, Allan, D. C., '95
Davis, Boothe C., N. Y., '96
Davis, B. M., Cal., '01
Davis, Ellery W., Neb., '99
Davis, Emma C., Ohio, '94
Davis, Geo. S., N. Y., '96
Davis, Geo. W., Ill., '96
Davis, Mrs. Grace D., Mo., '01
Davis, Jehiel K., Ill., '00
Davis, John W., N. Y., '95
Davis, L. O., Mich., '01
Davis, W. M., Mass., '99
Davison, Frank P., Vt., '01
Dawson, H. T., N. Y., '95
Deahl, J. N., W. Va., '96
Dean, Alletta F., Wis., '91
Dean, Mrs. Annie B., Wis., '99
Dean, Arthur D., Mass., '01
Dean, E. P., Ohio, '01
Dean, R. B., Mich., '01
Deane, Chas. W., Conn., '89
Dearborn, Ambrose C., Ill., '01
Dearthmont, W. S., Mo., '99
Dearness, F. W., Ohio, '01
Deatrict, W. W., Pa., '92
Decker, Wm. H., N. Mex., '99
De Garmo, Chas. N. Y., '89
Delano, Edward C., Ill., '95
Demarest, J. B. T., N. Y., '00
Denfeld, Robt. E., Minn., '95
Denison Univ. Library, Ohio, '00
Dept. Pub. Instr., Ill., '99
Deputy, M. W., Ind., '01
Derby, Samuel C., Ohio, '01
Deupree, J. G., Miss., '97
Dewey, Jas. A., Pa., '93
Dewey, John, Ill., '97
Dewey, Melvin, N. Y., '92
De Wolf, Daniel F., Ohio, '81
Dexter, E. G., Ill., '98
Dial, S. T., Ohio, '95
Dick, Fred. Colo., '95
Dickens, J. L., Tenn., '00
Dickinson College, Pa., '99
Dickinson, Frances, Ill., '01
Dickey, C. L., Ohio, '95
Dietrich, John, Colo., '95
Dillman, L. M., Ill., '86
Dinsmore, J. W., Ky., '98
Dix, Wm. T., Ill., '96
Dixon, B. V. R., La., '97
Doane, Letitia L., Ill., '97
Dodd, Arthur A., Mo., '95
Dodge, M. Luella, Ill., '97
Dodge, R. E., N. Y., '97
Dodge, Wm. C., Ill., '96
Doggett, W. E., N. Y., '00
Dolphin, Miss M. E., Kan., '95
Donohoe, Mary I., N. J., '94
Dougherty, Mabel E., Ill., '96
Dougherty, A. C., Ill., '87
Doughty, Jas. C., Nev., '99

- Douthett, A. T., Pa., '01
 Dow, James J., Minn., '96
 Downey, Miss B. P., Mont., '99
 Downing, A. S., N. Y., '91
 Downing, M. W., Vt., '01
 Downs, Edgar R., Colo., '94
 Doyle, Marie E., Wis., '91
 Doyme, J. J., Ark., '99
 Dozier, Melville, Cal., '95
 Draper, Andrew S., Ill., '88
 Dreher, E. S., S. C., '96
 Dresser, Mrs. R. L. R., N. J., '99
 Drew, Nellie L., Minn., '01
 Ducker, W. H., Ill., '95
 Dudgeon, R. B., Wis., '94
 Dudley, Mrs. E., Iowa, '96
 Dunton, Charles H., Vt., '01
Dutton, Bettie A., Ohio, '80
 Dutton, Chas. F., Jr., Ohio, '01
 Dutton, S. T., N. Y., '95
 Dyer, F. B., Ohio, '96
 Dyer, Edwin F., Colo., '00
 Dyer, Frank R., Kan., '91
 Dyke, Chas. B., H. I., '99
 Eakins, Mrs. Millie R., N. J., '96
 E. Ill. St. Nor. School, Ill., '99
 Eastman, Wm. R., N. Y., '96
 Easton, Warren, La., '95
 Eaton, G. A., Utah, '01
 Eaton, Ira T., Ill., '94
 Eaton, John, D. C., '93
 Ebaugh, Z. C., Md., '97
 Eberlein, Amanda R., Ill., '01
 Eberlein, Ella, Mo., '01
Eden, Philip, Wis., '84
 Edgerly, Jos. G., Mass., '96
 Ed. Asso., N. D., '96
 Editor's Library, N. Y., '97
 Edmonds, F. S., Pa., '98
 Edmund, Gertrude, Mass., '97
 Edsall, James M., N. Y., '01
 Edson, A. W., N. Y., '96
 Edwards, Anna E., Cal., '99
 Edwards, H. R., Minn., '97
 Edwards, J. E., Md., '98
 Edwards, W. A., Cal., '99
 Edwards, W. S., Cal., '99
 Ehinger, C. E., Pa., '97
 Elder, Ella C., N. Y., '96
 Elder, E. W., Colo., '95
 Elgas, Mathew J., N. Y., '91
 Eliot, Chas. W., Mass., '92
 Elliff, J. D., Mo., '98
 Elliott, A. M., Md., '99
 Elliott, E. C., Colo., '99
 Elliott, Mrs. Franc R., Utah, '01
 Elliott, J. F., Ala., '98
 Elliott, Nellie L., Iowa, '01
 Ellis, Frank R., Ohio, '01
 Ellis, John C., Ill., '87
 Ellis, Wm. Austin, Mich., '87
 Ellis, W. S., Ind., '00
 Ellsworth, Henry W., N. Y., '97
 Elmer, Frances A., Minn., '96
 Elson, W. H., Mich., '95
 Elterich, Bertha, N. J., '00
 Ellwell, Mrs. O. F., N. J., '96
 Ely, Sarah Y., N. J., '92
 Emerson, Henry P., N. Y., '93
Emery, John O., Wis., '84
 Emm, Henry C., Minn., '96
English, Rebecca F., Cal., '88
 Eppstein, J. M., Ill., '01
 Erkenberry, C. M., Ohio, '01
 Errant, Joseph W., Ill., '00
 Estabrook, J. B., Mich., '99
 Estee, Jas. A., N. Y., '96
 Evans, Mrs. Adaline, Okla., '01
Evans, Chas. H., Mo., '86
 Evans, Elizabeth C., Ohio, '01
 Evans, Lawton B., Ga., '94
 Evans, Wm. P., Mo., '98
 Everett, John P., Mich., '01
 Ewing, R. D., Mich., '99
 Ewing, W. W., Ariz., '01
 Faber, Jerdina, N. Mex., '01
 Fagan, Rev. J. P., D. C., '99
Fairchild, E. T., Kan., '86
 Fall, Delos, Mich., '97
 Fant, John C., Miss., '97
 Farley, Anne J., N. Y., '97
 Farley, D. H., N. J., '96
 Farley, Geo. L., Neb., '97
 Farmer, A. E., Idaho, '01
 Farnsworth, Fannie P., Minn., '98
 Farnsworth, S. A., Minn., '94
 Farrand, Wilson, N. J., '95
 Farrell, Edw. D., N. Y., '90
 Farrington, E. A., Utah, '90
 Farson, M. Elizabeth, Ill., '97
 Faulkner, R. D., Cal., '99
 Faunce, Wm. H. P., R. I., '01
 Fay, Charles S., Ohio, '01
 Fay, Edw. A., D. C., '99
 Felker, Allie M., H. I., '95
 Fell, Anna M., N. J., '97
 Fell, Thomas, Md., '98
 Felmley, David, Ill., '00
 Fels, Maurice, Pa., '98
 Fendley, J. M., Tex., '95
 Fenton, Geo., N. Y., '92
 Ferguson, E. E., Mich., '96
 Fernald, M. C., Me., '90
 Ferris, W. N., Mich., '99
 Fillmore, Nettie, Ohio, '00
 Finch, Dorothy, Mich., '01
 Fishburne, E. B., Va., '99
 Fisher, Gilman C., Mass., '92
 Fisher, H. W., Pa., '92
 Fisk, Herbert F., Ill., '91
 Fitch, Ferris S., Mich., '90
 Fitz, Geo. W., Mass., '98
 Fitzgibbons, T. F., Ind., '95
 Fitzpatrick, Frank A., Mass., '84
 Fleshman, Arthur C., Ind., '94
 Fletcher, A. H., Wis., '00
 Fletcher, S. S. F., Eng., '99
 Flickinger, J. R., Pa., '98
 Fling, Allen C., Neb., '98
 Floyd, Laura D., Ind., '98
 Floyd, W. L., Fla., '00
 Foerste, A. F., Ohio, '96
 Foos, Anna, Neb., '97
 Foote, L. O., Pa., '96
 Foote, Mary C., Ill., '97
Forbes, Alexander, Ill., '96
 Forbes, E. J., Australia, '01
 Forbes, John A., Ill., '98
 Ford, Lyman H., Iowa, '97
 Fordyce, Chas., Neb., '99
 Foresman, H. A., Ill., '96
 Foresman, Robt., Ill., '96
 Forrest, J. T., Wash., '95
 Fort, W. H., Mich., '97
 Fortney, J. R., Ohio, '01
 Foshay, Jas. A., Cal., '93
 Foster, C. E., Tex., '97
 Foster, John N., Wis., '01
 Fowler, W. K., Neb., '92
 Fox, Wm. F., Va., '94
 Francis, J. H., Cal., '99
 Franck, Augusta L., Mich., '01
 Frank, H. L., Ohio, '99
 Franklin, Geo. A., Minn., '97
 Frasher, Mrs. N. L. D., H. I., '00
 Frasier, W. A., Vt., '00
 Frazee, Victor, R. I., '96
 Frederick, J. M. H., Ohio, '01
 Frederick, O. G., Mich., '00
 Freeman, J. H., Ill., '95
 Freeman, John T., D. C., '98
 Freer, H. H., Iowa, '84
 French, Geo. W., N. Y., '95
 French, Harlan P., N. Y., '91
 French, John D., Neb., '99
 French, O. E., Iowa, '95
 French, Permeal, Idaho, '99
 French, Walter H., Mich., '00
 Friedberg, Wm. B., N. Y., '92
 Friedel, Chas., Ore., '97
 Friedman, Anna E., N. Y., '95
 Frisbee, H. D., N. Y., '99
 Frissell, H. B., Va., '00
 Frogge, S. L., Ky., '01
 Frost, H. H., Mich., '95
 Frost, J. M., Ill., '97
 Fruchte, Amelia C., Mo., '96
 Fry, W. W., Fla., '00
 Fryar, Sarah, Mass., '00
 Fulton, Robt. B., Miss., '94
 Fulton, W. L., Ohio, '96
 Fultz, Francis M., Iowa, '01
 Furst, Clara, Ind., '99
 Funk, J. P., Ind., '99
 Furst, Clyde, Pa., '00
 Futrall, Thos. A., Ark., '87
 Gage, Nathaniel P., D. C., '98
 Calbreath, T. C., Md., '99
 Gallup, E. E., Mich., '01
 Gammon, Mrs. M. D., Wis., '97
 Gans, W. G., Pa., '95
 Ganvoort, A. J., Ohio, '94
 Gardner, Helen R., Mich., '01
 Gardner, W. H., Neb., '01
 Garrett, Mary S., Pa., '97
Garrett, Wm. R., Tenn., '86
 Garrette, Irene, Iowa, '97
 Garvin, John B., Colo., '95
 Garwood, Ralph S., Mich., '01
 Gastman, E. A., Ill., '95
 Gaston, Chas. R., N. Y., '01
 Gates, Elmer, Md., '98
 Gates, Howard, Ark., '96
 Gates, Merrill E., D. C., '99
 Gayhart, Walter C., Nev., '95
 Gaylord, J. S., Minn., '00
 Geer, David S., Ill., '86
 Geeting, D. M., Ind., '95
 Geiger, F. P., Ohio, '90
 Gentle, T. H., Wis., '98
 George, Austin, Mich., '95
 Germann, Geo. B., N. Y., '98
 Gettemy, Mrs. M. E., Ill., '92
 Gibson, C. B., Ga., '98
 Gibson, John A., Pa., '96
 Giddens, L. P., Ala., '00
 Gideon, Geo. D., Pa., '99
 Gies, Fannie G., Minn., '01
 Giffin, W. M., Ill., '95
 Gilbert, C. B., N. Y., '93
 Gilbert, D. B., Neb., '01
 Gilbert, Irene, Mo., '00
 Gilbert, Mrs. M. E., Ill., '99
 Gilbert, Newell D., Ill., '95
 Gill, Chas. M., Mo., '01
 Gillam, I. T., Ark., '01
 Gillan, Silas Y., Wis., '95
 Gilleland, Tenetta, Ohio, '01
 Gillespie, Mary, Ill., '97
 Gilliam, R. F. S., C., '00
 Gilman, Daniel C., Md., '96
 Girtton, Wm. W., S. D., '99
 Girzi, Olga J., Mich., '99
 Given, Miss M. E., D. C., '01
 Gladding, A. E., Ohio, '96
 Glascock, Wm. H., Ind., '99
 Glase, Medora V., Tenn., '01
 Glass, E. C., Va., '94
 Glenn, Chas. B., Ala., '00
 Glenn, G. R., Ga., '95
 Gloftelter, J. H., Kan., '99
 Glover, Nathan L., Ohio, '89
 Gminder, A. J., Md., '98
 Goddard, Carrie, Kan., '01
 Goddard, Wm. E., Wis., '99
 Goggin, Catherine, Ill., '98
 Golden, H. W., Pa., '98
 Goodhue, Lincoln P., Ill., '93
 Goodknight, J. L., Ill., '95
 Goodnough, Walter S., N. Y., '82
 Goodrich, J. F., Mich., '01
 Goodwin, A. C., Ind., '99
 Goodwin, E. R., Mass., '01
 Goodyear, E. F., Cal., '99
 Gordon, C. H., Neb., '00
 Gordon, G. W., Tenn., '00
 Gordon, Jos. C., Ill., '97
 Gordy, J. P., N. Y., '96
 Gordy, W. F., Conn., '98
 Gorton, Chas. E., N. Y., '96
 Goss, Mrs. J. Abnfeldt, Mich., '01
 Gotwals, Jos. K., Pa., '92
Gove, Aaron, Colo., '88
 Gower, Hattie F., Cal., '99

- Graesser, C. A., S. C., '97
 Graham, Albert B., Ohio, '00
 Graham, B. C., Fla., '00
Graham, Hugh A., Mich., '95
 Graham, Jas. D., Cal., '99
 Grant, Miss A. L., D. C., '98
 Grant, H. L., Minn., '96
Gratz, Simon, Pa., '79
 Grawn, Chas. T., Mich., '01
 Gray, Arthur W., Cal., '00
 Gray, Frank D., Ind., '00
 Gray, H. W., N. Y., '98
 Gray, Jennie B., N. C., '00
 Greason, Elmira R., Okla., '00
 Greeley, J. P., Cal., '88
Green, Jas. M., N. J., '92
 Greene, John A., N. Y., '93
 Greenlee, L. C., Colo., '92
 Greenman, A. V., Ill., '97
Greenwood, J. M., Mo., '86
 Gregory, Benj. C., N. J., '94
 Gregory, G. A., Neb., '00
 Gregory, Lyman, Cal., '99
 Grenfell, Helen L., Colo., '99
 Griffin, E. H., Md., '99
 Griffin, Mary E., Mo., '01
 Griffith, E. W., N. Y., '96
 Griffith, Geo., N. Y., '93
 Griffiths, G. C., Ill., '96
 Griggs, Herbert, Colo., '99
 Grimsley, G. A., N. C., '98
 Grindle, H. D., Ohio, '90
 Gribsham, G. N., Mo., '00
 Griswold, Wells R., Ohio, '01
 Gross, Otis C., Wis., '96
 Groszmann, M. P., E. N. Y., '94
 Grote, Caroline, Ill., '01
 Grove, M. A., Pa., '97
 Grover, Edwin O., Ill., '00
 Groves, Chas. W., Ill., '96
 Grussendorf, D. A., Minn., '98
 Gruver, E. A., N. Y., '00
 Guden, Anna J., N. Y., '94
 Guilleams, J. M., Ga., '97
 Guinther, I. C., Ohio, '00
 Gunn, A. F., Cal., '99
 Gunnison, W. B., N. Y., '96
 Gusa, Roland W., Mass., '95
 Guttman, Albert, Wis., '97
 Haas, Nelson, N. J., '01
 Hadley, Hiram, N. Mex., '91
 Haerel, M. H., Ill., '99
 Hagemann, J. A., Wis., '99
 Hager, C. T., N. Mex., '95
 Haggerty, Geo. B., N. Mex., '97
 Haight, Nora B., Kan., '01
 Haight, R. A., Ill., '92
 Hailmann, W. N., Ohio, '79
 Hale, Geo. D., N. Y., '91
 Hale, Wm. G., Ill., '99
 Hale, Wm. H. C., Mich., '01
 Haley, Eliza A., Ill., '01
 Haley, Margaret A., Ill., '01
 Hall, Clark B., Mich., '01
 Hall, Dana W., Ill., '91
 Hall, Edwin H., Mass., '99
 Hall, Frank H., Ill., '97
 Hall, G. Stanley, Mass., '91
 Hall, H. L., Ind., '01
 Hall, Isaac Freeman, Mass., '95
 Hall, Loyal Freeman, Pa., '93
 Hall, Mary F., N. Y., '93
 Hall, W. S., Ill., '99
 Halland, J. G., N. D., '97
 Halleck, R. P., Ky., '97
 Halsey, R. H., Wis., '95
 Ham, Thomas C., Ill., '01
 Hambrecht, Geo. P., Wis., '99
 Hamilton, Jas. M., Mont., '95
 Hamilton, J. M., Ohio, '00
 Hamilton, J. W., Ind., '00
 Hamilton, R. I., Ind., '96
 Hamilton, Sam., Pa., '98
 Hamilton, Wm., D. C., '98
 Hamlin, Cyrus, Miss., '99
 Hammel, J. C., Cal., '99
 Hammel, W. C. A., Md., '00
 Hampton, Miss C., Fla., '00
 Hampton Institute, Va., '99
 Hancock, John A., Minn., '95
 Hand, W. H., S. C., '96
 Hanna, G. W., N. D., '00
 Hanna, John C., Ill., '98
 Hanson, Myra H., Ohio, '98
 Hanson, Willis E., Mich., '01
 Hanstein, Hermann, Ill., '01
 Hannus, Paul H., Mass., '95
 Hardy, Richard, Ill., '94
 Hare, Wm. B., Fla., '01
 Harlan, W. B., N. Y., '92
 Harlan, B. B., Ohio, '01
 Harper, Wm. R., Ill., '95
 Harrington, C. L., N. Y., '98
 Harris, Abram W., Me., '98
 Harris, Ada Van Stone, N. Y., '95
 Harris, Alice L., Mich., '01
 Harris, Edw. L., Ohio, '94
 Harris, Edwin S., N. Y., '98
 Harris, Henry E., N. J., '93
 Harris Inst. Lib'y, R. I., '99
 Harris, J. C., Ga., '99
 Harris, Jas. H., Mich., '98
 Harris, J. V., Fla., '00
 Harris, Julia A., Ohio, '94
 Harris, T. G., Tex., '05
Harris, Wm. T., D. C., '76
 Harrison, Mrs. A. M., Neb., '00
 Harrison, Elizabeth, Ill., '95
 Harrison, Miles W., Ind., '96
 Hart, Albert Bushnell, Mass., '95
 Hart, James R., Ind., '99
 Hartigan, Mary S. L., Ill., '95
 Hartman, Mary, Ill., '95
 Hartwell, Shattuck O., Mich., '01
 Harvard Coll. Lib'y, Mass., '95
Harvey, G. I., Okla., '86
Harvey, L. D., Wis., '84
 Harvey, N. A., Ill., '97
 Harwood, Samuel E., Ill., '00
 Haskins, C. H., Wis., '99
 Hatch, Ada P., S. D., '99
 Hatch, W. E., Mass., '97
 Hatch, W. H., Ill., '95
 Hatfield, C. B., Ky., '00
 Hatfield, I. H., Neb., '00
 Hauer, J. S., Ohio, '00
 Haupt, Chas., Ohio, '93
 Haupt, J. G., La., '96
 Haven, Caroline T., N. Y., '96
 Hawkins, Geo. K., N. Y., '00
 Hayden, H. B., Ill., '97
 Hayden, P. C., Iowa, '95
 Hayes, C. L., Fla., '00
 Hayes, Frances C., N. Y., '96
 Hayes, H. E., N. Y., '92
 Hays, Dudley G., Ill., '97
 Hays, James L., N. J., '00
 Hayward, Edw., N. Y., '95
Hayward, Emily A., Ill., '84
 Hazen, David H., D. C., '98
 Hazen, Lillian D., Cal., '99
 Heacock, E. H., Kan., '01
 Heath, D. C., Mass., '91
 Heath, E. L., Mich., '99
 Heaton, T. L., Cal., '99
 Hebdon, Edwin, Md., '00
 Heckman, S. B., P. R., '01
 Heermans, Josephine, Mo., '96
 Hefter, Celina, Ill., '01
 Heidler, S. H., Ill., '97
 Heighway, F. F., Ind., '99
 Heineken, J. F. D., N. J., '94
 Heizer, John A., Ohio, '99
 Heller, Regenia R., Mich., '01
 Helmer, Harry, Ill., '95
 Helter, Henry H., Ohio, '01
 Henderson, Mrs. Kate A., Ill., '97
 Henderson, Lena V., Mich., '01
 Hendrick, Welland, N. Y., '95
 Hendricks, J. P., Mont., '98
 Hendrix College, Ark., '97
 Henninger, J. W., Ill., '96
 Henry, Jas. A., Tenn., '96
 Henry, T. B., Kan., '00
 Henson, M. A., Ohio, '96
 Herey, Emma M., Colo., '01
 Hermanns, Edw. F., Colo., '95
 Hernandez, Enrique C., P. R., '01
 Herrick, C. A., Pa., '00
 Herrig, Anna B., S. D., '95
 Hershman, W. H., Ind., '96
 Hertel, Chas., Ill., '95
 Hervey, Henry D., R. I., '96
 Hervey, Walter L., N. Y., '95
 Herzog, Peter, Mo., '97
 Hess, M. E., W. Va., '01
 Hess, Wm. C., N. Y., '96
 Hester, W. A., Ind., '95
 Hewes, W. D., N. Y., '96
 Hewett, Edgar L., N. Mex., '99
Hewett, Edwin C., Ill., '84
 Hewitt, Kathryn I., N. Y., '01
 Hiatt, Amos, Iowa, '01
 Hicks, W. E., N. D., '01
 Hill, A. H., Ky., '01
 Hill, A. Ross, Neb., '99
 Hill, Frank A., Mass., '95
 Hill, John A., Ind., '99
 Hill, Mary, Wis., '96
 Hill, Walter B., Ga., '99
 Hillis, R. C., Ind., '00
 Hillsdale College, Mich., '00
 Hillyer, V. M., Md., '01
 Himelick, R. W., Ind., '00
 Himes, Robert W., Ohio, '99
 Himenon, J. H., Ark., '96
 Hinshaw, E. B., Ind. Ter., '00
 Hise, I. C., Iowa, '00
 Hiser, W. S., Ind., '98
 Hisey, Jos. C., Ill., '94
 Hitchcock, F. S., Conn., '01
Hits, John, D. C., '80
Hobs, Augusta W., Cal., '89
 Hockenberry, J. Coulter, N. J., '01
Hodgdon, Miss J. E., N. Y., '82
 Hodgins, Chas. E., N. Mex., '95
 Hodgins, Cyrus W., Ind., '95
 Hoegelsberger, Nora, D. C., '98
 Hofer, Amalie, Ill., '95
 Hoffman, Benj. F., Mo., '97
 Hoffman, Gaius, N. J., '94
 Hogan, Louise E., N. J., '98
 Hogg, Alex., Tex., '94
 Hogg, Miss F. O., Ark., '98
 Holbrook, Florence, Ill., '01
 Holden, C. C., N. Y., '98
 Hollingsworth, J. L., Fla., '95
 Holloway, J. L., Ark., '95
 Holmes, Evelyn, S. C., '00
 Holmes, M. A., S. C., '00
 Holmes, Manfred J., Ill., '00
 Homans, Amy M., Mass., '91
 Hooper, Louis L., D. C., '00
 Hooper, Sanford A., Cal., '89
Hoose, James H., Cal., '79
 Hoover, W. E., N. D., '97
 Hopkins, B. Smith, Mich., '01
 Hopkins, L. Grace, Minn., '94
 Hopkins, S. N., Okla., '98
 Hopper, Kate A., Mich., '01
 Horchem, B. J., Iowa, '97
 Hornberger, J. A., Ill., '95
 Hotchkiss, H. V., Ohio, '00
 Houck, Henry, Pa., '97
 House, L. J., Ohio, '98
 Housh, W. H., Cal., '99
 Houston, Harvey, Conn., '01
 Houston, J. R., Ind., '96
 Howard, F. E., Conn., '96
 Howard, Geo. A., Ohio, '95
 Howard, Olive, Mich., '01
 Howe, Agnes E., Cal., '99
 Howe, Geo. H., Ill., '98
 Howe, Laura, N. Y., '91
 Howe, S. B., N. Y., '95
 Howe, Wilbur W., N. Y., '95
 Howell, Geo., Pa., '96
 Howell, Logan D., N. Y., '94
 Howarth, Ira W., Ill., '99
 Hoyt, C. O., Mich., '97
 Hoyt, David W., R. I., '98
 Hoyt, Judson E., Wis., '90
Hoyt, J. W., D. C., '70
 Hubbard, Mrs. E. A., Ill., '97

- *Hubbard, F. V., Minn., '95
 Hubbell, G. A., N. Y., '01
 Hudson, Arthur S., Mich., '01
 Huffman, Ashley J., Ohio, '01
 Huffman, J. R., Ohio, '98
 Hufford, Geo. W., Ind., '94
 Hughes, Mrs. Ada M., Can., '95
 Hughes, Isaac H., Mo., '98
 Hughes, Jas. L., Can., '90
 Hughes, J. L., Ill., '98
 Hughes, John F., N. Y., '98
 Hughes, R. C., Wis., '00
 Hughes, R. L., Ind., '00
 Hughes, W. F., Ohio, '00
 Huling, Ray Greene, Mass., '91
 Hull, John, Wash., '91
 Hull, Lawrence C., N. Y., '93
 Hull, Philip M., N. Y., '99
 Hull, Warren C., Mich., '97
 Huisart, J. H., N. J., '99
 Humke, Albert E., Ind., '93
 Humphrey, S. P., Ohio, '00
 Hunt, Mary H., Mass., '87
 Huntley, O. V., Ind., '01
 Hunter, A. D., Cal., '99
 Hunter, Thos., N. Y., '85
 Hurd, Geo. B., Mass., '88
 Hursh, Samuel B., Ill., '00
 Hussey, A. W., Ill., '97
 Hussey, J. M., Iowa, '97
 Hutchinson, N. E., Ohio, '00
 Hutchinson, Miss K. I., Minn., '01
 Hutton, A. J., Wis., '84
 Hutton, Chas. E., Cal., '95
 Hutton, Thomas B., Iowa, '00
 Hyatt, F. H., Cal., '99
 Hyde, Mary F., N. Y., '92
 Hyde, Martha, Colo., '91
 Ill. State Nor. Univ., '98
 Imperial Library of Japan, '00
 Ind. Nor. Sch. of Pa., '99
 Ind. State Library, '97
 Ind. State Nor. Sch., Ind., '97
 Ind. Univ. Library, '99
 Ingalls, Will C., N. J., '94
 Ingerson, Carl I., Mo., '00
 Iowa College, Grinnell, '00
 Iowa St. Coll. Library, Ames, '01
 *Irwin, John S., Ind., '80
 Irons, Foster H., Tenn., '00
 Irvine, V. K., Pa., '01
 Jackman, Wilbur S., Ill., '95
 Jackson, Edward F., Mo., '01
 Jackson, Mrs. E. R., N. Mex., '95
 Jackson, Wm. R., Neb., '96
 Jacobs, Walter Ballou, R. I., '94
 Jacob Tonic Inst., Md., '98
 James, Geo. F., Cal., '01
 *James, Henry H., Ore., '84
 Jameson, H. W., N. Y., '97
 Jandon, Thos. P., Jr., Mo., '98
 Jeffers, F. A., Mich., '01
 Jeffrey, J. H., Ind., '00
 Jenkins, O. P., Cal., '99
 Jenkins, Sara D., N. Y., '95
 Jenner, G. L., Mich., '01
 Jennings, C. D., Mich., '01
 Jersey City Pub. Lib'y, N. J., '97
 Jesse, Richard H., Mo., '92
 Jewett, A. F., Kan., '86
 John B. Stetson Univ., Fla., '99
 John Cerar Library, Ill., '97
 Johns Hopkins Univ., Md., '99
 Johnson, A. B., Ohio, '00
 Johnson, Anna P., Ohio, '01
 Johnson, D. B. S. C., '95
 Johnson, Ernest Henry, Mass., '93
 Johnson, F. W., Me., '98
 Johnson, Henry, Ill., '99
 Johnson, H. M., D. C., '98
 Johnson, Jesse S., Ohio, '98
 Johnson, J. Walter, Idaho, '01
 Johnson, M. Edwin, Ill., '01
 Johnson, Minnie C., N. C., '01
 Johnson, S. Arthur, Colo., '94
 Johnson, T. S., Kan., '99
 Johnson, W. H., Mont., '95
 Johnston, T. A., Mo., '01
 Johnstone, E. R., N. J., '96
 Jones, A. Leroy, N. Y., '99
 Jones, Arthur O., Ohio, '91
 Jones, E. A., Ohio, '84
 Jones, Edwin A., Mass., '01
 Jones, E. C. Lloyd, Wis., '97
 Jones, Edward N., N. Y., '84
 Jones, Emma F., Ill., '97
 Jones, Frank L., Ind., '95
 Jones, Herbert J., Mass., '96
 Jones, Jane Lloyd, Wis., '97
 Jones, J. W., Ohio, '96
 Jones, L. H., Ohio, '89
 Jones, Mattie, S. D., '94
 Jones, Myra, Mich., '92
 Jones, Richard, Tenn., '94
 Jordahl, Sivert A., S. D., '01
 Jordan, Chas. M., Minn., '93
 Jordan, David S., Cal., '98
 Joyce, Margaret E., Wis., '01
 Joyce, Minnie F., Wis., '01
 Joyner, J. Y., N. C., '98
 Judson, Isaac N., Mo., '01
 Kammann, C. H., Ill., '97
 Kane, T. F., N. Y., '89
 Kansas State Agri. Coll., '97
 Karr, Grant, N. Y., '99
 Kean, Lura B., Ohio, '00
 *Kean, John J., Iowa, '89
 Keating, J. F., Colo., '95
 Keeler, Fred. L., Mich., '01
 Keeler, Harriet L., Ohio, '94
 Keister, W. H., Va., '00
 Kellogg, Amos M., N. Y., '90
 Kelly, John D., Ky., '01
 Kelsey, Earl J., Ill., '00
 Kemper, T. Francis, W. Va., '01
 Kenaston, G. F., Ind., '95
 Kendall, C. N., Ind., '95
 Kendall, F. A., Ill., '95
 Kencerson, A. H., Mass., '95
 Kennedy, Jas. W., N. J., '94
 Kennedy, John, N. Y., '99
 Kennedy, Jos., N. D., '96
 Kennedy, P. P., Minn., '97
 Kenyon, A. B., N. Y., '96
 Keppel, F. P., N. Y., '01
 Keppler, Mrs. W. S., Fla., '94
 Kerlin, W. D., Ind., '97
 Kern, O. J., Ill., '00
 Kerr, Wm. J., Utah, '95
 Keyes, Chas. H., Conn., '95
 Keyes, Mrs. Helen B., Conn., '01
 Keystone Lit. Soc., Pa., '98
 Kiehle, D. L., Minn., '80
 Kilbourne, Effie J., Ill., '95
 Kimmel, M. A., Ohio, '93
 Kincaid, Herbert T., Ohio, '95
 King, Anne H., Ohio, '95
 King, F. A., Ohio, '96
 King, Robt. M., Ill., '01
 King, Wm. F., Iowa, '84
 Kinney, Burt O., Cal., '99
 Kinnison, J. E., Ohio, '01
 Kinsley, M. H., N. J., '92
 Kirk, Alfred, Ill., '99
 Kirk, John R., Mo., '91
 Kirk, T. H., Cal., '99
 Kirk, Thos. J., Cal., '95
 Kirk, W. H., Ohio, '01
 Kirkpatrick, E. A., Mass., '97
 Kleeberger, Geo. R., Minn., '95
 *Klock, J. E., N. H., '86
 Kneil, Thos. R., N. Y., '95
 Kuepper, Geo. E., Idaho, '98
 Knight, G. L., S. C., '00
 Knight, Lee R., Ohio, '00
 Koehler, Miss M. R., N. Mex., '99
 Kolbe, Julia C., Ohio, '95
 Koontz, J. A., Mont., '95
 Kraege, F. G., Wis., '97
 Krall, G. W., Mo., '98
 Krebs, H. C., N. J., '01
 Kratz, H. E., Iowa, '90
 Kraus-Boeltje, Mrs. M., N. Y., '96
 Krecsy, Bela, Hungary, '93
 Krieg, A. N., Ohio, '00
 Kroh, Carl J., Ill., '97
 Krohn, Wm. O., Ill., '93
 Krout, Chas. A., Ohio, '00
 Krug, Joseph, Ohio, '01
 Kruse, Edwina B., Del., '91
 Kuhn, John P., Ohio, '01
 Kuntz, C. A., Cal., '99
 Kuykendall, A. C., Ky., '98
 Kyselka, Frank, Mont., '01
 Ladd, A. J., Mich., '01
 Lagomarsino, Cynthia, N. Y., '94
 Lane, Mrs. Ada E., Ohio, '90
 Land, S. B., Mich., '96
 Lake, Theo. F., N. Y., '01
 Lamar, C. P., Ill., '99
 Lamb, Eli M., Md., '94
 Lamb, Rachel E., Md., '94
 Lambert, Vashli A., Ill., '95
 Lambertson, Mary J., Pa., '92
 Lancaster, E. G., Ohio, '99
 Lancaster, G. Wash., '98
 Landers, J. S., Ore., '99
 Landrum, L. M., Ga., '97
 Lane, Albert G., Ill., '84
 Lane, Mrs. F. S., Ill., '94
 Lang, Mary A., Cal., '01
 Lang, Ossian H., N. Y., '91
 Lang, Rosa A., Ill., '01
 Lange, D., Minn., '99
 Lansinger, J. W., Pa., '98
 Lapey, Louise M., N. Y., '95
 Largent, S. D., Mont., '99
 Larimer, Henry C., Kan., '86
 Lark, F. E., Iowa, '97
 Larkins, Chas. D., N. Y., '95
 La Rowe, Eugene, Mich., '01
 Lash, W. D., Ohio, '99
 La Taste, Lucien V., Ala., '94
 Lathrop, Mrs. C. N., Ohio, '93
 Laughlin, W. Frank, Mich., '01
 Lavers, E. C., Pa., '92
 Lawrence, Isabel, Minn., '94
 Lawrence Univ., Wis., '99
 Laws, Annie, Ohio, '95
 Lawson, Florence, Cal., '97
 Lawton, Chas. E., N. Y., '96
 Lay, Wilfrid, N. Y., '00
 Layton, S. Herrick, Ohio, '95
 Lazenby, Wm. R., Ohio, '95
 Leach, Cephas H., Ill., '07
 Leavell, Richard M., Miss., '96
 Leavenworth, P. R., Vt., '01
 Lee, Carema M., Colo., '01
 Lee, James, N. Y., '92
 Lee, Lucius O., Turkey, '01
 Lefavour, Henry, Mass., '01
 Lehig Univ., Pa., '99
 Lelcherts, E. M., Minn., '99
 Lehr, Henry S., Ohio, '01
 Leipziger, Henry M., N. Y., '01
 Leiter, Mrs. Frances W., Ohio, '97
 Leland Stanford Jr. Univ., Cal., '97
 Lemon, Anna E., Cal., '98
 Lemon, J. E., Ill., '99
 Lemfest, B. A., Mass., '00
 Leonard, Albert, Mich., '01
 Leonard, H. B., Mich., '01
 Leslie, Miss H. S., N. J., '94
 Levinson, Irwen, Minn., '95
 Lewellen, John O., Ind., '96
 Lewis, Jane M., N. J., '92
 Lewis, J. H., Minn., '99
 Lewis, J. M., Mont., '01
 Lewis, J. W., S. D., '01
 Lewis, Leslie, Ill., '95
 Lewis, W. F., Mich., '01
 Libraries, Cardiff, Wales, '99
 Library, Free, Allegheny, Pa., '00
 Library, Altona Mech., Pa., '00
 Library, Amherst Coll., Mass., '00
 Library Association, Springfield, Mass., '98
 Library, Athenæum, Minn., '95
 Library, Boston, Mass., '00
 Library, Brockport N. Sch., N. Y., '00
 Library, Bryson, N. Y., '98
 Library, Buffalo, N. Y., '99

- Library, Butte, Mont., '00
Library, Carnegie, Allegheny, Pa., '00
Library, Carnegie, Pittsfield, Pa., '99
Library, Chicago Pub., Ill., '98
Library, Cleveland, Ohio, '97
Library of Congress, Chile, '01
Library, Detroit, Mich., '97
Library, Dover, N. H., '00
Library, Editors', N. Y., '97
Library, Harris Inst., R. I., '99
Library, Harvard Coll., '95
Library, Imp., Japan, '00
Library, Ind. Univ., Ind., '99
Library, Jersey City, N. J., '97
Library, John Crerar, Ill., '97
Library, Kalamazoo, Mich., '01
Library, Malden, Mass., '00
Library, Milwaukee, Wis., '98
Library, Mpls. Ath., Minn., '98
Library, M. T. Dept., T. Coll., N. Y., '99
Library, Newberry, Ill., '98
Library, N. H. State, '98
Library, New York, N. Y., '99
Library, Omaha, Neb., '98
Library, Ped., Supt. of Schs., Pa., '00
Library, Philadelphia, Pa., '97
Library, Port Jervis, N. Y., '99
Library, Pratt Inst., N. Y., '01
Library, Queens Borough, N. Y., '01
Library, Rockford Pub., Ill., '99
Library, Salem, Mass., '00
Library, San Francisco, Cal., '97
Library, Scoville Inst., Ill., '00
Library, Scranton, Pa., '99
Library, Somerville, Mass., '00
Library, Springfield, Mass., '98
Library, State, Cal., '99
Library, *St. Hist. Soc.*, Wis., '84
Library, State, Ind., '97
Library, State, Mass., '98
Library, State, N. H., '98
Library, St. Joseph, Mo., '00
Library, St. Louis, Mo., '00
Library, Superior N. Sch., Wis., '00
Library, Syracuse, N. Y., '98
Library, Topeka, Kan., '00
Library, Univ. of Mich., '98
Library, Univ. of Minn., '01
Library, Univ. of Pa., '98
Library, Univ. of Wyo., '97
Library, Wheeling, W. Va., '01
Library, Wilmington, Del., '01
Library, Worcester, Mass., '98
Light, C. M., N. Mex., '95
Lightbody, Wm., Mich., '96
Limerick, A. N., Kan., '86
Lincoln College, Ill., '97
Ling, Chas. J., Colo., '95
Ling, L. E. A., Iowa, '90
Little, Clara L., Colo., '95
Locke, Geo. H., Ill., '01
Locke, John S., Me., '95
Logan, Anna E., Ohio, '96
Lollar, Ezra E., Ind., '99
Long, J. L., Tex., '96
Long, Paul J., N. C., '00
Long, R. L., Ariz., '98
Longan, G. B., Mo., '97
Longenecker, Gertrude, Ill., '00
Loomis, Alma E., Mo., '01
Loos, Chas. L., Ohio, '95
Lord, Edward, N. Y., '97
Lord, Livingston C., Ill., '94
Lott, Henry C., Mich., '97
Lounsberry, Louise A., N. Y., '96
Lovell, Thomas B., N. Y., '96
Loveridge, L. E., Ill., '98
Lovett, Fulton N., Tex., '01
Low, Seth, N. Y., '95
Lowry, Charles D., Ill., '97
Lowther, L. A., Kan., '97
Luckey, Edwin D., Mo., '94
Luckey, G. W. A., Neb., '95
Luebke, Emma J., Wis., '97
Lugg, Mary L., Wis., '97
Lukens, Herman T., Pa., '92
Lyle, E. G., Mo., '01
Lyman, E. A., Mich., '98
Lynch, Chas. P., Ohio, '94
Lynch, M. M., Va., '98
Lynch, S. A., Wis., '01
Lynch, Wm. H., Mo., '95
Lyon, Edmund D., Ohio, '98
Lyon, P. W., N. J., '98
Lyon, W. F., Mich., '97
Lyons, G. K., Ohio, '98
Lyser, Albert, Cal., '98
Lyte, E. Oram, Pa., '91
Lytle, Eugene W., N. Y., '98
Maas, J. J., Ohio, '99
MacAllister, Jas., Pa., '95
MacCracken, John H., Mo., '01
Macdona, Kate P., N. Y., '95
MacDonald, John, Kan., '86
MacDonald, Margaret, Ill., '96
MacGowan, W. L., Pa., '96
Mack, Wm. S., Ill., '95
MacKenzie, David, Mich., '96
Mackey, E., Pa., '87
Mackey, Wm. A., N. Y., '94
MacLean, Geo. E., Iowa, '97
MacVannel, John A., N. Y., '01
Magovern, Mary A., N. Y., '96
Maharry, S. H., Ohio, '95
Maitland, Mrs. Louise, N. Y., '98
Malsbary, Alfred E., Ind., '98
Mandeville, Jas. M., Mich., '96
Mann, C. E., Ill., '00
Mann, Emma, Ark., '98
Manners, Chas. L., Ill., '01
Manness, S. E., N. J., '92
Mansfield, Edith, Pa., '01
Marble, A. P., N. Y., '80
Mardis, S. K., Ohio, '95
Mark, Cecil W., Cal., '98
Mark E. H., Ky., '93
Marlatt, Abby L., R. I., '94
Marquis, J. S., S. C., '98
Marsh, C. O., Wis., '97
Marsh, I. Adelia, Ill., '01
Marsh, Miles E., Ky., '98
Marshall, T. M., W. Va., '77
Martin, A. E., Ind., '01
Martin, Artemas, D. C., '98
Martin, Geo. H., Mass., '93
Martin, O. W., Ohio, '01
Martindale, C. W., S. D., '00
Martindale, W. C., Mich., '97
Marvin, Arthur, N. Y., '98
Mason, Wm. A., Pa., '98
Mass. Inst. Tech., Mass., '00
Massee, J. Edman, N. Y., '96
Massey, John, Ala., '94
Mather, I. F., Ind., '97
Mathes, Mrs. Lena B., Fla., '00
Matheson, Fred. J., England, '01
Mathews, Byron C., N. J., '92
Matlock, J. D., Ala., '98
Matthews, A. J., Ariz., '99
Maurer, G. C., Ohio, '95
Maxson, C. H., P. I., '00
Maxson, Henry M., N. J., '92
Maxwell, Guy E., Minn., '00
Maxwell, Mary, Pa., '01
Maxwell, Wm. H., N. Y., '92
May, Mary C., Utah, '01
Maycock, Mark M., N. Y., '96
Mayer, Anna L., Ill., '01
Mayer, Mary H., Pa., '00
Mayne, D. D., Mich., '94
Mays, Vernon G., Mich., '98
McAndrews, Wm., N. Y., '00
McArdle, H. W., N. D., '98
McBride, J. K., Tex., '98
McCabe, C. B., Pa., '96
McCahan, John E., Md., '91
McCallie, J. H., Tenn., '97
McCarthy, Edward C., Mich., '01
McCartney, Livingstone, Ky., '95
McCaslin, E. E., D. C., '98
McChesney, H. V., Ky., '01
McClain, Wm., Jr., Ohio, '01
McClendon, Mrs. N. B., S. D., '01
McClintock, O. P. M., Kan., '94
McClung, J. S., Colo., '95
McClure, Letha L., Minn., '01
McClymonds, J. W., Cal., '99
McConathy, W. J., Ky., '95
McConnell, J. J., Iowa, '95
McCord, W. A., Iowa, '95
McCowan, S. M., Ariz., '01
McCoy, Mary, Ill., '97
McCoy, Claudius T., Ohio, '00
McCracken, S. B., Ind., '01
McCrimmon, Flora, Colo., '01
McCulloch, Mary C., Mo., '92
McCulloch, J. F., Ill., '96
McCulloch, Nathan, Fla., '01
McDaniel, C. M., Ind., '96
McDevitt, Rev. P. R., Pa., '00
McFarland, Geo. A., N. D., '95
McGee, L. A., Wis., '01
McGhee, W. Zach., S. C., '00
McGivray, J. A., Va., '00
McGivray, J. E., Ohio, '01
McGlynn, J. J., Ill., '95
McGregor, A. G., Ind., '01
McIntire, W. W., Ohio, '95
McIver, Chas. D., N. C., '96
McKean, Adeline V., N. Y., '01
McKean, J. E., Ohio, '01
McKee, J. Milford, N. Y., '95
McKee, Wm. P., Ill., '99
McKenny, Chas., Wis., '97
McKerrow, Helen W., Mich., '01
McKillop, Anna, Ill., '97
McKnight, L. A., Ind., '01
McKone, W. J., Mich., '99
McLaughlin, A. L., Ill., '95
McLaury, John C., N. J., '01
McLean, James A., Idaho, '01
McLoughlin, Edw., Ill., '99
McLoughlin, Mrs. Edw., Ill., '99
McLouth, J. A., S. D., '01
McMahon, J. J., S. C., '99
McMillan, D. A., Mo., '99
McMillan, J. V., Ohio, '96
McMillan, Mrs. R., Ohio, '80
McMurry, Chas. A., Ill., '90
McMurry, F. M., N. Y., '95
McMurry, Mrs. L. B., Ill., '96
McNeal, Florence, Mo., '92
McNeill, I. C., Wis., '92
McRae, O. F., Ga., '00
McVay, Herbert R., Ohio, '00
McVicar, Peter, Kan., '86
Meador, Frederick D., Can., '01
Meek, Wm. H., Ohio, '00
Meek, James R., Ill., '01
Meland, E. C., Wis., '97
Melaney, C. E., N. Y., '96
Mercer Univ. Lib., Ga., '99
Merica, F. M., Wis., '97
Merrick, H. V., Ohio, '98
Merrifield, Webster, N. D., '95
Merrill, Chas. E., N. Y., '94
Merrill, Edwin C., N. J., '96
Merrill, Geo. A., Cal., '00
Merrill, Harriet B., Wis., '96
Merrill, J. A., Wis., '97
Merrill, Jenny B., N. Y., '93
Merritt, E. L., Conn., '00
Mertz, Henry N., Ohio, '95
Merwin, J. B., Mo., '71
Merz, Henry, Wyo., '95
Meserve, Alonzo, Mass., '95
Meskimons, J. R., Ariz., '99
Metcalf, Robert C., Mass., '92
Meyer, F. H., Cal., '99
Miami University, Ohio, '95
Michener, J. H., Pa., '98
Mich. State Nor. Coll., '00
Mickens, Chas. W., Minn., '00
Mickle, Robt. A., Ala., '95
Middleton, A. Ill., '99
Midland Coll., Kan., '99
Miles, Emily H., Colo., '98
Miller, C. C., Ohio, '92

- Miller, Geo. I., Iowa, '96
 Miller, Geo. J., Mich., '01
 Miller, Geo. McA., Mo., '01
 Miller, G. R., N. Y., '96
Miller, J. H., Wash., '86
 Miller, John C., Minn., '98
 Miller, Kelly, D. C., '98
 Miller, Lucia M., Minn., '94
 Miller, O. L., Ill., '96
 Miller, W. C., W. Va., '00
 Milligan, Sarah J., Mo., '97
 Million, John W., Mo., '01
 Mills, Wm. A., Ind., '96
 Mills, Leida H., Kan., '95
 Millsbaugh, J. F., Minn., '95
 Milne, John M., N. Y., '91
 Milne, Wm. J., N. Y., '92
 Milner, Mrs. Florence, Mich., '01
 Milwaukee Public Lib'y, Wis., '98
 Mingins, Clara W., Mich., '00
 Minneapolis Athenæum, Minn., '98
 Mitchell, B. W., Pa., '99
 Mitchell, Isaac, Ill., '99
 Mitchell, M. S., Kan., '95
 Mitchell, R. W., Ohio, '00
 Moldstad, John A., Wis., '97
 Monlux, J. B., Cal., '95
 Monroe, E. S., Ind., '97
 Monroe, Will S., Mass., '88
Nonsarrat, Mrs. L. L., Ky., '77
 Montague, A. P., S. C., '99
 Mont. State Coll., Mont., '99
 Montaser, Fred., N. Y., '94
 Montgomery, Eudora, Ill., '97
 Montgomery, H. C., Ind., '97
 Montgomery, W. S., D. C., '98
 Montrose, Otis, N. Y., '96
 Moon, A. W., N. J., '89
 Moore, B. F., Ind., '95
 Moore, Dora M., Colo., '95
 Moore, E. C., Cal., '99
 Moore, G. A., Iowa, '01
 Moore, J. A., Ala., '01
 Moore, Montgomery, Ill., '97
 Moores, Carrie E., Ohio, '95
 Morgan, J. H., Wash., '95
 Morgan, R. T., Ill., '97
Morris, Harriet N., Cal., '82
 Morris, John, Ky., '96
 Morris, John E., Ohio, '00
 Morrison, Andrew J., Pa., '81
 Morrison, G. B., Mo., '99
 Morrison, Henry C., N. H., '00
 Morrison, Rose, Ohio, '97
 Morse, Frank L., Ill., '97
 Morse, W. A., Mich., '01
 Morss, Chas. H., Mass., '95
 Morton, Frank, Cal., '99
 Mosher, E. H., Cal., '99
 Mott, Thomas A., Ind., '96
 Mower, F. O., Cal., '99
Mowry, Wm. A., Mass., '96
 Muckley, H. C., Ohio, '01
 Muellenschlager, A., Wis., '01
 Mulford, A. Isabel, Mo., '96
 Mulligan, Mary S., Ind., '01
 Mumma, H. W., Ohio, '00
 Munroe, Jas. P., Mass., '95
 Murdaugh, E. D., Okla., '98
 Murdock, F. F., Mass., '98
 Murlee, H. O., Ala., '01
 Murlin, L. H., Kan., '95
 Murphy, Anna M., Ill., '01
 Murphy, Eugene, Pa., '98
 Murphy, Geo. T., Mo., '91
 Murray, Anna, Ill., '98
 Murray, May E., Mass., '99
 Murray, Wm. S., Turkey, '98
 Murrey, T. P., Ark., '98
 Myers, Ida G., D. C., '01
 Myers, Will A., Ind., '97
 Myrick, H., Mass., '98
 Naff, J. H., Kan., '99
 Nagel, J. J., Iowa, '95
 Nageler, J. G., Wis., '97
 Nash, Louis P., Mass., '99
 Ne Collins, J. E., N. Y., '94
 Needham, Milton J., Ariz., '00
 Needham, O., Wis., '97
 Nellis, Geo. W., Iowa, '01
 Nelson, B. E., Ill., '99
 Nelson, E. B., N. Y., '98
 Nelson, Frank, Kan., '99
 Nelson, Kate S., Wis., '96
 Newberry Lib'y, D. C., '98
 Newell, A. C., Iowa, '01
 Newell, Miss C. S., Kan., '95
 New Hampshire State Lib'y, '98
 New Haven Pub. Lib'y, Conn., '01
 Newkirk, C. F., Ill., '98
 Newman, Emma A., N. Y., '00
 Newton, H. D., N. Y., '95
 New York Pub. Lib'y, '99
 Nichols, Chas. E., N. Y., '99
 Nichols, Fred R., Ill., '93
 Nichols, Walter H., Colo., '01
 Nicholson, Mary E., Ind., '85
 Nicholson, Watson, Conn., '99
 Nielsen, Carl H., Cal., '98
 Nightingale, A. F., Ill., '86
 Noel, Alex. H., Mo., '97
 Noetling, Wm., Pa., '98
 Noien, A. Eugene, Mass., '91
 N. St. Nor. Sch., Mich., '99
 Nor. Sch., Dayton, O., '98
 N. Dak. Ed. Assoc., '96
 N. Ill. St. Nor. Sch., '99
 N. Ind. Nor. Sch. Lib'y, '97
 Norton, A. W., S. D., '93
 Norton, R. C., Mo., '95
 Norton, W. H., Iowa, '01
 Norville, Josephine, Mo., '95
 Noss, Theo. B., Pa., '96
 Nussbaum, Sophie F. E., D. C., '98
Nye, Chas. H., Wis., '84
 Nykirk, John B., Mich., '92
 O'Brien, Mrs. Agnes, N. Y., '94
 O'Brien, Katheryn A., Ill., '01
 O'Brien, Theresa, Ill., '01
 O'Callaghan, W. F., N. Y., '94
 O'Connor, D. C., Neb., '94
O'Connor, Joseph, Cal., '88
 O'dell, Malcolm W., Iowa, '01
 O'Dell, Lucien B., Ind., '00
 Ogg, R. A., Ind., '97
 O'Grady, C. Geraldine, N. Y., '01
 O'Grady, Julia, Ill., '01
 Ogren, John, S. C., '00
 O'Hanlon, R. J., Wis., '97
 Ohio State Univ., '97
 O'Keefe, Mrs. S. J., Ill., '96
 Olds, Mary L., Minn., '94
 Oldt, F. T., Iowa, '96
 Oldt, J. C., Ohio, '01
 O'Leary, J. A., Mich., '01
 O'Leary, Kate S., Ill., '95
 Olin, Arvin S., Kan., '90
 Olsen, John W., Minn., '00
 Omaha Pub. Lib'y, Neb., '98
 Ormsby, F. B., Ill., '96
 *Orr, J. D., Kan., '91
 Osborne, C. E., N. J., '01
 Osgood, Anna M., Ohio, '90
 O'Shea, M. V., Wis., '92
 Oswego Nor. & Tr. Sch., N. Y., '00
 Ott, Harvey N., Ill., '01
 Outcalt, Irving E., Cal., '01
 Owen, Hugh A., N. Mex., '97
 Owen, Lincoln, Mass., '96
 Owen, W. B., Ill., '96
 Owens, C. J., S. C., '00
 Paessler, V. J., S. N. Y., '98
 Page, Edw. A., N. Y., '99
 Page, Edw. C., Ill., '00
 Page, R. S., Ill., '96
 Painter, D. H., Minn., '01
 Palmer, A. N., Iowa, '96
 Palmer, Chas. S., Colo., '95
 Palmer, E. D., Mich., '94
 Palmer, E. W., Colo., '98
 Palmer, Francis B., N. Y., '90
 Palmerlee, C. E., Mich., '01
 Palmerlee, L. S., Mich., '01
 Parker, Alice N., D. C., '98
Parker, Chas. L., Ill., '87
 Parker, Chas. V., Colo., '87
 Parker, C. M., Ill., '95
 Parker, Francis W., Ill., '80
 Parker, Henry M., Ohio, '95
 Parker, John L., Ala., '01
 Parker, J. W., Ark., '97
 Parker, M. M., Ariz., '99
Parker, W. D., Wis., '84
 Parker, W. S., Mass., '96
 Parkinson, D. B., Ill., '97
Parkinson, John B., Wis., '84
 Parmenter, Chas. W., Mass., '95
 Parrish, Celestia S., Va., '97
 Parsons, Jas. R., Jr., N. Y., '01
 Passmore, John A. M., Pa., '92
 Patten, Frank C., Mont., '97
 Pattengill, Henry R., Mich., '92
 Patterson, J. H., Ky., '01
 Patton, Cassia, Alaska, '96
 Patton, Chas. L., N. Y., '85
 Payne, W. C., Ill., '96
 Payne, Wm. H., Mich., '92
 Peabody, Helen S., S. D., '01
 Peacher, A. L., Ark., '96
 Peacock, Mary C., Pa., '98
 Peairs, H. B., Kan., '97
 Peak, Chas. N., Ind., '96
 Pearcey, Jas. B., Ind., '01
 Pearce, C. G., Neb., '91
 Pearson, Henry, Ga., '98
 Pearson, H. C., Pa., '99
 Pearson, Juliet, N. Y., '99
 Pearson, T. G., N. C., '00
 Pease, Alvin F., Mass., '91
 Pease, N. W., N. J., '94
Peaslee, John B., Ohio, '80
 Peck, A. L., N. Y., '97
 Ped. Lib'y, S. of Schs., Pa., '00
 Peirce, Eugene C., Iowa, '01
Pennell, Calvin S., Minn., '64
 Penniman, J. H., Pa., '99
 Penn. State Coll., Pa., '00
 Pennypacker, J. L., Pa., '00
 Peres, I. H., Tenn., '00
 Perkins Institution, Mass., '97
 Perrin, John W., Ohio, '01
 Petrine, Laura L., N. D., '95
 Perry, Alfred T., Ohio, '00
 Perry, Elizabeth H., Mass., '91
 Perry, Reuben, Wis., '01
 Perry, Wm. H., Ky., '98
 Peterson, J. P., Wis., '97
 Pettis, Rilla A., S. D., '01
 Pettis, J. Wilson, Ark., '01
 Phelan, W. W., D. C., '98
Phelps, Wm. F., Minn., '70
Philadelphian Soc., Wis., '84
 Philbrook, C. F., Ill., '95
 Phillips, Geo. M., Pa., '79
 Phillips, H. S., Colo., '99
 Phillips, Daniel E., Colo., '00
 Phillips, Katie A., Iowa, '96
 Phillips, J. H., Ala., '88
 Phillips, Mrs. J. H., Ala., '01
 Philomathean Lit. Soc., Pa., '98
Pickard, Josiah L., Me., '86
 Pickrell, Percy, Ill., '99
 Pierce, Edw. T., Cal., '89
 Pierce, Mrs. Ella M., R. I., '96
 Pierce, Lovick, D. C., '98
 Pierce, Mary R., Ill., '97
 Pierce, Thos. P., Ohio, '01
 Pigg, G. L., S. D., '99
Pier, Joshua, Ill., '91
 Pinkerton, T. B., Ohio, '99
 Pippin, Mrs. E. E., Md., '00
 Pippin, J. A., Mass., '99
 Pittinger, O. M., Ind., '01
 Place, Mrs. C. L., Minn., '96
 Plapp, F. W., Ill., '97
 Plimpton, Geo. A., N. Y., '94
 Plumer, Geo. M., Ohio, '96
 Poland, A. B., N. J., '92
 Pollock, Rosalie, Utah, '96
 Pollock, Susan P., D. C., '94
 Pomona Coll., Cal., '99
 Porter, E. A., F., Ohio, '97
 Port Jervis F. Lib'y, N. Y., '99
 Posse, Baroness Rose, Mass., '95

- Potter, Grace T., Ill., '01
 Pound, E. A., Ga., '01
 Pound, J. M., Ga., '01
 Powell, Arthur, Ohio, '00
 Powell, W. B., N. Y., '92
 Powell, W. F., D. C., '89
 Power, Gusie, N. Y., '87
 Powers, Jas. K., Ala., '05
 Prather, Wm. L., Tex., '01
 Pratt Inst. Free Lib'y, N. Y., '01
 Pratt, R. H., Pa., '08
 Pratt, W. A., Iowa, '01
 Pray, Mabel L., Ohio, '07
 Pray, T. B., Wis., '94
 Preece, Mrs. Louise, Minn., '94
 Prentiss, H. W., Mo., '97
 Prentiss, Jennie, Ohio, '01
 Preston, J. R., Mass., '90
 Prettyman, E. B., Md., '92
 Prichard, E. H., Ohio, '95
 Prichard, Margaret S., Pa., '98
 Prillerman, Byrd, W. Va., '91
 Prince, John T., Mass., '91
 Principals' Round Table, Wilmington, Del., '01
 Pritchard, M. T., Mass., '96
 Pritchett Coll., Mo., '00
 Pritchett, H. C., Tex., '98
 Proudfoot, Mrs. A. H., Ill., '97
 Pub. Lib'y, Boston, Mass., '00
 Pub. Lib'y, Butte, Mont., '00
 Pub. Lib'y, Detroit, Mich., '97
 Pub. Lib'y, Dover, N. H., '00
 Pub. Lib'y, Jersey City, N. J., '97
 Pub. Lib'y, Kalamazoo, Mich., '01
 Pub. Lib'y, Los Angeles, Cal., '00
 Pub. Lib'y, Lynn, Mass., '00
 Pub. Lib'y, Malden, Mass., '00
 Pub. Lib'y, New Haven, Conn., '01
 Pub. Lib'y, New York, N. Y., '99
 Pub. Lib'y, Philadelphia, Pa., '97
 Pub. Lib'y, Rockford, Ill., '99
 Pub. Lib'y, Salem, Mass., '00
 Pub. Lib'y, S. Francisco, Cal., '00
 Pub. Lib'y, Somerville, Mass., '97
 Pub. Lib'y, St. Joseph, Mo., '00
 Pub. Lib'y, St. Louis, Mo., '90
 Pub. Lib'y, Topeka, Kan., '00
 Pub. Lib'y, Wheeling, W. Va., '01
 Pub. Lib'y, Worcester, Mass., '98
Pub. Sch. Teachers, Wis., '84
 Pugh, Jas. H., Ill., '08
 Pulsifer, Wm. E., N. Y., '99
 Purer, Mary I., Ill., '96
 Putnam, Mrs. Alice H., Ill., '93
 Putnam, Richard R., Mich., '01
 Putney, Chas. G., Mich., '01
 Queens Borough Lib'y, N. Y., '01
 Quick, Geo. F., Ind., '01
 Race, S. J., Minn., '95
 Raines, S. E., Ill., '01
 Rakestraw, Chas. D., D. C., '99
 Ramsay, Chas. C., Mass., '93
 Ramsey, Geo. J., Va., '89
 Ramsey, Mary C., Wyo., '01
 Randall, J. E., Ohio, '98
 Ranger, W. E., Vt., '99
 Rankin, A. W., Minn., '93
 Ransom, Frances E., N. Y., '99
 Rapp, Christian F., Ohio, '99
 Rapp, Eli M., Pa., '97
 Raschig, H. H., Ohio, '93
 Rathman, C. G., Mo., '01
 Raub, A. N., Del., '92
 Ravenhill, Alice, England, '01
 Rawson, E. B., N. Y., '99
 Rayman, Elmer E., Ohio, '01
 Rayman, R. E., Ohio, '95
 Raymond, A. V., N. Y., '95
 Read, J. Irving, Cal., '98
 Redman, Elmer S., N. Y., '00
 Redmond, Wm., Kan., '01
 Redway, Jacques, N. Y., '00
 Reed, A. A., Iowa, '95
 Reeder, W. C., Ohio, '98
 Reel, Estelle, Wyo., '94
 Rees, Minnie E., Cal., '99
 Reeves, C. F., Wash., '96
 Reid, Jas., Mont., '95
 Reigart, J. F., N. Y., '99
 Reiley, Cynthia E., Mont., '95
 Reinhart, J. Albert, N. Y., '94
 Remington, L. D., Mich., '96
 Rennick, Louise D., Ill., '97
 Rennie, Robert H., Ill., '97
 Requa, M. Augusta, N. Y., '99
 Resler, Edwin D., Ore., '92
 Reveley, Ellen G., Ohio, '91
 Reynolds, Chas. B., Mo., '95
 Reynolds, J. H., Ark., '97
 Rhoads, McHenry, Ky., '91
 Rhode Island Nor. Sch., '97
 Rice, Emily A., N. J., '92
 Rice, Gratia L., N. Y., '89
 Rice, J. M., N. Y., '95
 Rice, Wm. N., Conn., '99
 Richards, C. R., N. Y., '98
 Richards, D. M., N. M., '01
 Richards, Mrs. E. H., Mass., '98
 Richards, Mrs. L. A., N. Mex., '01
 Richardson, B. C., Me., '01
 Richardson, Kate S., Wis., '01
 Richeson, J., Ill., '97
Richmond, Sarah E., Md., '96
 Ricketts, Emily, Ind., '01
 Riddle, W., Pa., '96
 Ridgeway, Wm. C., Mo., '98
 Rieman, John F., Ind., '98
 Rightsell, J. R., Ark., '98
 Rigler, Frank, Ore., '98
Riley Co. Ed. Asso., Kan., '86
 Riley, Mrs. M. E., Mo., '90
 Riste, Ernest, Wash., '99
 Riste, W. G., Kan., '97
 Ritchie, Ada M., Ohio, '01
 Rivers, W. W., Ark., '95
Roach, T. W., Kan., '86
 Robbins, C. W., Mo., '92
 Robbins, Geo. A., Ill., '97
Robert, Jas. A., Ohio, '82
 Roberts, Dimon H., Mich., '98
 Roberts, Edw. D., Ohio, '00
 Roberts, Flora, Ind., '96
 Roberts, Geo. L., Ind., '01
 Roberts, Hester A., N. Y., '94
 Roberts, H. L., Ill., '97
 Roberts, L. D., Wis., '97
 Roberts, Wm. E., Ohio, '98
 Robertson, J. L., Ill., '97
 Robertson, P. W., D. C., '96
 Robinson, Albert R., Ill., '95
 Robinson, Lucy W., Va., '96
 Robinson, Oscar D., N. Y., '92
 Robinson, W. S., Ohio, '95
 Rocheleau, W. F., Ill., '96
 Rochford, Anna T., Ill., '01
 Rockwood, Geo. H., Ill., '00
 Rogers, A. C., Minn., '99
 Rogers, Dora B., W. Va., '96
 Rogers, Howard J., N. Y., '96
 Rogers, J. N., Ga., '99
 Rogers, Josephine E., N. Y., '93
 Rogers, Revillus R., N. Y., '95
 Roller, F., Ohio, '98
 Roof, F. M., Ala., '96
Roop, C. Y., Cal., '86
 Root, Chas. C., Neb., '01
Rose, Geo. E., Kan., '86
 Rose, S. L., Ohio, '96
 Ross, M. M., Tenn., '99
 Ross, Pete W., Minn., '99
 Ross, W. H., S. D., '01
 Rossetter, E. C., Ill., '00
 Roth, Anna C., Ky., '97
 Rothe, Ella A., Ohio, '00
**Rounds, Chas. C.*, N. Y., '96
 Row, R. K., Ill., '99
 Rowe, Ella A., Ill., '01
 Rowe, H. M., Md., '96
 Rowe, Mary E., Ind., '95
 Rowe, Stuart H., Conn., '98
 Rowe, W. S., Ind., '95
 Rowland, J. H., Ohio, '96
 Rudolph, Ida, Ky., '96
 Russell, Jas. E., N. Y., '95
 Russell, W. P., Ill., '99
 Rust, Fred W., Ill., '01
 Ryan, Mary E., Mont., '99
 Ryan, C. M., N. Y., '96
 Saben, Alfred S., Mass., '01
 Sabin, Albert R., Ill., '84
 Sabin, Ellen C., Wis., '95
 Sabin, Henry, Iowa, '89
 Sage, A. H., Wis., '98
 Sage, W. V., Mich., '96
 Sale, A. R., Iowa, '97
 Salem Pub. Lib'y, Mass., '00
 Salisbury, Albert, Wis., '87
 Samuel, Wm. H., Pa., '93
 Sanders, Alan, Ohio, '01
 Sanders, D. E., Wash., '95
 Sanders, F. W., Germany, '97
 Sandison, Howard, Ind., '96
 Sanford, Fernando, Cal., '97
 Sanford, Henry R., N. Y., '95
 Sanor, S. D., Ohio, '93
 Sargent, Dudley A., Mass., '96
 Sargent, Eliza A., Mass., '96
 Sarver, J. M., Ohio, '98
 Saunders, Sara A., N. Y., '96
 Savitz, J., N. J., '99
Sawkill, Thos. A., Kan., '86
 Sawvel, Franklin B., Pa., '94
 Sawyer, C. L., Minn., '97
 Saylor, J. F., Wash., '96
 Scarlett, Augustus, N. J., '91
 Schaeffer, Nathan C., Pa., '87
 Schaffner, Alfred T., N. Y., '95
 Schellenger, G. J., S. D., '91
 Schiller, J. D., Mich., '96
 Schmidt, F. A., N. Y., '96
 Schmucker, S. C., Pa., '92
 Schneider, Henry G., N. Y., '95
 Schobinger, J. J., Ill., '99
Schofield, Martha, Kan., '91
 Schofield, Bessie M., R. I., '96
 Sch. of Ed., Univ. of Chicago, Ill., '99
 Sch. of Ped., N. Y. Univ., N. Y., '99
 Schreiber, Mae E., N. Y., '96
 Schryver, Anna A., Mich., '96
 Schurman, J. G., N. Y., '96
Schuyler, Aaron, Kan., '86
 Schuyler, E. H., N. J., '94
 Schuyler, Wm., Mo., '01
 Schwietert, H. J., Iowa, '01
 Scotia Seminary, N. C., '99
 Scott, Chas. B., P. R., '90
 Scott, Edith A., Minn., '99
 Scott, E. H., Ill., '95
 Scott, F. N., Mich., '97
 Scott, Harriet M., Cal., '96
 Scott, Izora, Colo., '97
 Scott, J. B., Ill., '99
 Scott, Jas. W., Colo., '93
 Scott, O. C., Ill., '95
 Scott, W. H., Ohio, '93
 Scovel, E. C., Minn., '01
 Scovel, Sylvester F., Ohio, '97
 Scoville Inst., Ill., '00
 Scudder, Myron T., N. Y., '95
 Scull, Jas. F., Ind., '95
 Seale, F. E., Mich., '99
 Seale, Miss S. M., N. J., '93
 Seaver, Edwin P., Mass., '93
 Sedgwick, Wm. T., Mass., '99
 Seeley, Levi, N. J., '90
 Seeley, H. H., Iowa, '89
 Sellick, Roda E., Ind., '01
 Sellick, W. F. F., Minn., '98
 Senger, Harry L., Ohio, '01
 Sexton, E. K., N. J., '97
 Seymour, R. B., Ill., '90
 Shanahan, Rev. J. W., Pa., '95
 Sharkey, J. F., Ohio, '90
 Shaver, Chas. A., N. Y., '00
 Shaw, A. L., Neb., '97
 Shaw, Edw. R., N. Y., '93
Shaw, Sam., Wis., '84
Shawson, J. A., Ohio, '94
 Sheakley, Samuel H., Iowa, '00
 Shear, S. R., N. Y., '95

- Shearer, W. J., N. J., '95
 Shearer, W. S., Iowa, '97
 Sheats, W. N., Fla., '93
 Shelley, Kate, Mont., '01
 Shelton, F. M., Ohio, '99
 Shepard, Elmer I., Minn., '00
 Shepard, Geo. C., Va., '97
 Shepard, Irwin, Minn., '83
 Sheppard, L. W., Ohio, '98
 Sherer, Albert H., Ohio, '00
 Sherman, Chas. M., Wash., '01
 Sherman, J. P., N. Y., '01
 Sherwood, Mrs. J. C., Cal., '99
 Sherwood, Martha A., Mich., '01
 Shield, W. B., Mo., '01
 Shippen, Edw., Pa., '79
 Shirk, David F., Kan., '95
 Shoemaker, W. A., Minn., '95
 Shoop, John D., Ill., '00
 Shorkley, Mrs. H. B., Cal., '99
 Shortwell, Ambrose M., Mich., '01
 Shotwell, J. B., Ohio, '01
 Showers, F. F., Wis., '99
 Shultess, Alice H., Wis., '99
 Shumaker, F. P., Ohio, '99
 Shutts, Geo. C., Wis., '96
 Sibley, Chas. A., Mass., '95
 Siders, Walter R., Idaho, '01
 Siefert, H. O. R., Wis., '95
 Silke, Lucy S., Ill., '03
 Silver, Edgar O., N. Y., '04
 Silver, Elmer E., Mass., '99
 Simerwell, E. A., Kan., '95
 Simkins, J. D., Ohio, '01
 Simmons, J. W., Wis., '99
 Simonds, H. A., Wis., '95
 Simonson, R. B. D., Mo., '00
 Sims, J. F., Wis., '97
 Sinclair, S. B., Can., '91
 Singer, Edgar A., Pa., '80
 Sisson, E. O., Ill., '97
 Skidmore, Sydney T., Pa., '95
 Skinner, Chas. R., N. Y., '90
 Skinner, Elizabeth, Colo., '99
 Skinner, Wm. C., Mich., '95
 Slack, H. W., Minn., '97
 Slaton, W. F., Ga., '97
 Slaton, W. M., Mich., '94
 Slauson, H. M., Mich., '94
 Sloan, Lucy A., Mich., '00
 Sloane, Clyde, Ill., '98
 Smalley, D. H., Ill., '99
 Smallwood, Mabel E., Ill., '96
 Smedley, Eva A., Ill., '97
 Smiley, Elmer E., Wyo., '00
 Smiley, Mrs. Mary S., Colo., '01
 Smiley, Wm. H., Colo., '92
 Smith, Alex., Ill., '90
 Smith, Arthur, P., Mass., '90
 Smith, A. Thos., Pa., '93
 Smith, Anna T., D. C., '95
 Smith, Mrs. C. B., Ill., '98
 Smith College, Mass., '98
 Smith, D. E., N. Y., '01
 Smith, E. E., Ill., '96
 Smith, E. R., Ill., '97
 Smith, E. S., Ill., '01
 Smith, Euler, B., Ga., '87
 Smith, F. Everett, S. D., '01
 Smith, F. P., Kan., '97
 Smith, Geo. M., S. D., '95
 Smith, Geo. W., Ill., '99
 Smith, Harriet E., Wis., '97
 Smith, Henry B., Colo., '99
 Smith, H. J., N. Y., '05
 Smith, Irving B., N. Y., '99
 Smith, J. E., Tex., '99
 Smith, J. F., Ohio, '98
 Smith, J. L., Ill., '00
 Smith, J. Mace, N. Y., '95
 Smith, Jos. R., Pa., '99
 Smith, M. B., Mass., '99
 Smith, Sidney F., D. C., '95
 Smith College, Mass., '98
 Smyth, W. S., Ill., '95
 Snedden, D. S., Cal., '99
 Snow, Bonnie E., Minn., '96
 Snow, Francis H., Kan., '93
 Snow, Mary S., N. Y., '98
 Snyder, A. J., Ill., '97
 Snyder, Henry, N. J., '94
 Snyder, Jessie M., Ga., '97
 Snyder, J. H., Ohio, '96
 Snyder, J. L., Mich., '89
 Snyder, W. H., Mass., '01
 Snyder, W. R., Ind., '95
 Snyder, Z. X., Colo., '87
 Snyder, Mrs. Z. X., Colo., '96
 Soldan F. Louis, Mo., '77
 Sollitt, Alice E., Ill., '93
 Somerville Pub. Lib'y, Mass., '00
 Soper, Laura J., Can., '01
 Soule, Geo. La., '92
 S. Dak. Agri. Coll., S. D., '99
 S. Ill. Nor. Univ., Ill., '99
 Southall, J. W., Va., '98
 Spain, Chas. L., Mich., '01
 Spangler, H. T., Pa., '94
 Spaulding, F. E., N. J., '96
 Spaulding, Randall, N. J., '92
 Spaunhurst, J. F., Ind., '00
 Spayd, H. H., Pa., '92
 Speer, W. W., Ill., '96
 Spencer, Catherine, Mo., '97
 Spencer, Pauline W., Pa., '93
 Spencer, Robt. C., Wis., '84
 Spencer, Mrs. Sara A., D. C., '92
 Spencer, Thos. E., Mo., '00
 Spero, Mrs. Anna K., Cal., '77
 Spiegle, Grace E., Pa., '99
 Spindler, J. W., Kan., '99
 Springer, Durand W., Mich., '94
 Squire, Mary V., N. Y., '96
 Stableton, J. K., Ill., '00
 Stalker, Francis M., Ind., '01
 Stanley, Edmund, Kan., '86
 Stanton, Otis G., Ind., '01
 Staples, Helen F., Minn., '96
 Stapleton, M. A. C., Mont., '99
 Stark, Yoshua, Wis., '90
 Starke, N. C., Va., '94
 St. F. N. Sch., Farmville, Va., '99
 State Agri. Coll., Kan., '97
 St. Historical Soc., Wis., '84
 State Library, Cal., '99
 State Library, Mass., '98
 State Nor. Coll., Mich., '00
 St. N. and Ind. Coll., N. C., '00
 St. N. Sch., Brockport, N. Y., '00
 St. N. Sch., California, Pa., '99
 St. N. Sch., Carbondale, Ill., '99
 St. N. Sch., Cedar Falls, Iowa, '97
 St. N. Sch., Charleston, Ill., '99
 St. N. Sch., Chico, Cal., '97
 St. N. Sch., De Kalb, Ill., '99
 St. N. Sch., Ellensburg, Wash., '97
 St. N. Sch., Fairmont, W. Va., '01
 St. N. Sch., Farmville, Va., '99
 St. N. Sch., Fitchburg, Mass., '98
 St. N. Sch., Greeley, Colo., '97
 St. N. Sch., Indiana, Pa., '99
 St. N. Sch., Jacksonville, Ala., '99
 St. N. Sch., Los Angeles, Cal., '97
 St. N. Sch., Mankato, Minn., '99
 St. N. Sch., Mansfield, Pa., '97
 St. N. Sch., Mayville, N. D., '00
 St. N. Sch., Millersville, Pa., '97
 St. N. Sch., Marquette, Mich., '99
 St. N. Sch., Monmouth, Ore., '01
 St. N. Sch., Moorhead, Minn., '97
 St. N. Sch., New Paltz, N. Y., '99
 St. N. Sch., Normal, Ill., '98
 St. N. Sch., Oshkosh, Wis., '98
 St. N. Sch., Oswego, N. Y., '00
 St. N. Sch., Platteville, Wis., '84
 St. N. Sch., Providence, R. I., '97
 St. N. Sch., Salem, Mass., '00
 St. N. Sch., San José, Cal., '98
 St. N. Sch., St. Cloud, Minn., '97
 St. N. Sch., Superior, Wis., '00
 St. N. Sch., Terre Haute, Ind., '97
 St. N. Sch., Trenton, N. J., '97
 St. N. Sch., Westfield, Mass., '97
 St. N. Sch., W. Liberty, W. Va., '00
 St. Nor. Sch., Whatcom, Wash., '00
 St. N. Sch., Whitewater, Wis., '98
 St. N. Sch., Winona, Minn., '97
 St. Teachers' Assoc. of Ill., '90
 St. Univ. Lib'y, Iowa, '97
 St. Univ. Lib'y, Ohio, '97
 St. Clair, W. T., Ky., '01
 Stearns, J. W., Wis., '84
 Steele, Wm. L., Ill., '90
 Steen, J. M., Tenn., '00
 Steere, E. A., Mont., '96
 Stehman, J. H., Ill., '97
 Stein, F. W., Cal., '99
 Stephens, H. Morse, N. Y., '96
 Stephens, J. P., Pa., '01
 Stephens, M. Bates, Md., '95
 Stephenson, Lillie S., Ill., '98
 Stern Meno, N. Y., '82
 Stetson, W. W., Me., '95
 Stevens, C. K., Ohio, '01
 Stevens, Edw. L., N. Y., '99
 Stevens, Moses C., Ind., '76
 Stevens, Plowden, Jr., N. Y., '95
 Stevenson, A. L., Ill., '97
 Stevenson, Wm. C., Md., '90
 Steward, Darius, Minn., '00
 Stewart, I. N., Wis., '84
 Stewart, John A., Mich., '84
 Stewart, Jos. S., Ga., '95
 Stewart, N. Coe, Ohio, '92
 Stewart, Sarah A., N. Y., '84
 Stickney, Lucia, Ohio, '93
 Stigall, Oliver, Mo., '94
 Stilwell, Miss E. O. S. D., '01
 Stritt, E. W., N. Y., '96
 St. Louis Pub. Lib'y, Mo., '00
 Stockwell, Mrs. H. H., N. D., '94
 Stockwell, Thos. B., R. I., '91
 Stockwell, Walter L., N. D., '94
 Stokes, A. L. S. C., '00
 Stokes, Horace A., Ohio, '95
 Stokes, Susan G., Utah, '99
 Stone, Mason S., P. I., '94
 Stonerod, Rebecca D. D. C., '96
 Storm, A. V., Iowa, '94
 Stout, Geo. H., Pa., '84
 Stout, Isaac H., N. Y., '90
 Stout, J. D., Iowa, '98
 Stovall, Anna M., Cal., '99
 Stowell, Thos. B., N. Y., '91
 Strachan, Alex. S., D., '97
 Stratton, C. C., Ore., '88
 Stratton, F. E., Minn., '86
 Straubenmüller, G. N., N. Y., '97
 Strickland, W. S., Ohio, '99
 Strine, J. H., Cal., '99
 Stroeter, E. H., Mo., '99
 Strong, Edwin A., Mich., '92
 Strong, Jas. W., Minn., '95
 Struthers, Hester C., N. C., '98
 Stuart, Alex., T. D. C., '00
 Stuart, Margaret, Ill., '01
 Stuart, Giles A., Conn., '99
 Stubbs, J. E., Nev., '95
 Study, J. N., Ind., '97
 Stuver, E., Colo., '95
 Sudborough, Mrs. G., Neb., '80
 Sullivan, Ella C., Ill., '99
 Summers, Alex., D. C., '98
 Sunderlin, A. V., Iowa, '00
 Super, Chas. W., Ohio, '91
 Superior St. Nor. Sch. Lib'y, '00
 Suplee, Etta, Iowa, '95
 Suplee, Fannie, Iowa, '95
 Supt. and Prin. Assn., Wis., '84
 Surette, Thos. W., N. Y., '01
 Suter, Anna, Ind., '90
 Suter, Mias H. A., La., '94
 Sutherland, E. B., Mich., '01
 Sutherland, Marg. W., Ohio, '95
 Sutton, W. S., Tex., '95
 Suydam, V. A., Wis., '99
 Swain, G. R., Mich., '01
 Swain, Jos., Ind., '93
 Swan, Phebe, Wis., '97
 Swanger, F. A., Cal., '99
 Swart, Rose C., Wis., '95
 Swartz, Jno. W., Ohio, '99
 Sweeney, Ella L., R. I., '00
 Sweet, Benj. A., Ill., '00

- Swett, John, Cal., '99
 Swingle, W. M., N. J., '98
 Syracuse Cent. Lib., N. Y., '98
 Tadd, J., Liberty, Pa., '98
 Tait, Elizabeth S., Pa., '98
 Talbot, Henry, Ill., '92
 Tapley, Wm. W., Mass., '92
 Tappan, H. S., Ohio, '99
 Tarbell, Horace S., R. I., '91
 Tarr, Ralph S., N. Y., '99
 Tate, W. K., S. C., '99
 Taubman, Kate, S. D., '94
 Tawney, Guy A., Wis., '98
 Taylor, A. R., Ill., '86
 Taylor, Edw., Ky., '96
 Taylor, Henry J., Iowa, '84
 Taylor, Jos. S., N. Y., '94
 Taylor, R. A., N. Y., '01
 T'ch's Assn. Cowley Co., Kan., '86
 T'ch's Assn. Riley Co., Kan., '86
 Teachers' Association, Wis., '84
 Teachers Coll., Dept. Man. Tr., N. Y., '99
 T'ch's Inst. Phila., Pa., '79
 Templeton, J. C., Cal., '94
 Terrel, Harriet E., Ohio, '96
 Terrell, Robert H., D. C., '98
 Thames, W. I., Miss., '97
 Tharpe, F. D., Mo., '91
 Thatcher, Jas. L., Iowa, '96
 Thayer, Ada F., N. Y., '96
 Theilmann, Louis, Mo., '95
 Thiry, J. H., N. Y., '97
 Thomas, Blanche T., Ariz., '98
 Thomas, D. W., Ind., '96
 Thomas, Emma A., Mich., '96
 Thomas, Isaac, Va., '99
 Thomas, Jennie L., Mich., '00
 Thomas, W. Scott, N. Y., '99
 Thompson, A. B., Ind., '01
 Thompson, D. M., N. C., '98
 Thompson, E. C., Mich., '94
 Thompson, Fannie E., Ohio, '99
 Thompson, H. E., Okla., '95
 Thompson, J. H., Mich., '01
 Thompson, John G., Mass., '95
 Thompson, L. S., N. J., '96
 Thompson, O. D., Mich., '96
 Thompson, T. E., Mass., '97
 Thompson, Wm. O., Ohio, '94
 Thompson, Frank D., Ill., '95
 Thorndyke, E. L., N. Y., '98
 Thornhill, E. A., Ill., '01
 Thorson, I. A., Minn., '98
 Thudium, C. C., Mo., '98
 Thurber, Chas. H., Mass., '93
 Thweatt, Hiram H., Ga., '00
 Thwing, Chas. F., Ohio, '95
 Thwing, F. F., Ky., '01
 Tibbets, Anna, Neb., '94
 Tibbetts, A. C., Minn., '95
 Tibbitts, H. S., Ill., '00
 Tighe, R. J., N. C., '00
 Tillotson, D. C., Kan., '86
 Tilton, Chas. S., Wash., '99
 Tinker, B. W., Conn., '97
 Todd, Samuel B., Wis., '95
 Toepel, Theo., Ga., '01
 Tolman, Henry L., Ill., '97
 Tompkins, A., Ill., '96
 Tormey, J. A., Minn., '97
 Tower, Belle M., Mich., '90
 Towne, Geo. L., Neb., '00
 Townsend, H. S., P. I., '99
 Townsend, J. A., N. Y., '99
 Tracy, Frank N., Ill., '96
 Trant, Amelia Earle, N. Y., '96
 Trask, H. M., Pa., '95
 Travell, Ira W., N. J., '97
 Trent, E. O., Ark., '01
 Tressler, A. W., Wis., '92
 Treudley, F., Ohio, '91
 Triplett, Wm., Colo., '01
 Trisler, J. L., Ohio, '01
 Trotter, J. R., W. Va., '97
 Trowbridge, G. S., Cal., '99
 Truman, Emma L., S. D., '01
 Trybom, J. H., Mich., '00
 Tual. Acad. Pacif. Univ., Ore., '99
 Tucker, Lucy B., Ohio, '01
 Tuger, Margaret E., N. Y., '01
 Turner, Alfred, Mass., '95
 Turner, C. W., Neb., '99
 Turner, Eugene F., Tenn., '00
 Turner, F. L., Ill., '00
 Turner, J. E., Ill., '95
 Turner, J. M., Wis., '97
 Turner, Marie L., Mo., '95
 Tuttle, Albert H., Va., '96
 Tutwiler, Julia S., Ala., '82
 Twichell, Hattie, Mass., '95
 Twichell, W. S., N. J., '01
 Twiggs, T. P., Mich., '01
 Twining, Nathan C., Ill., '84
 Twiss, Geo. R., Ohio, '94
 Twitshell, W. I., Conn., '01
 Twitmyer, Geo. W., Del., '90
 Tynan, T. T., Wyo., '99
 Underhill, Volney, Ill., '93
 University, Atlanta, Ga., '95
 University, Brown, R. I., '01
 University, Columbia, N. Y., '95
 University, Cornell, N. Y., '96
 University, Denison, Ohio, '00
 University, Harvard, Mass., '95
 University, J. B. Stetson, Fla., '99
 University, Johns Hopkins, Md., '99
 University, Lawrence, Wis., '99
 University, Lehigh, Pa., '99
 University, Leland Stanford Jr., Cal., '97
 University, Mercer, Ga., '99
 University, Miami, Ohio, '95
 University, S. Ill. Nor., '99
 University, West Virginia, '99
 University of Arizona, '01
 University of California, '95
 University of Chicago, Ill., '99
 University of Georgia, '95
 University of Illinois, '99
 University of Indiana, '99
 University of Iowa, '97
 University of Michigan, '98
 University of Minnesota, '00
 University of Missouri, '95
 University of Nebraska, '98
 University of N. Carolina, '99
 University of N. Dakota, '99
 University of Ohio, '97
 University of Oklahoma, '99
 University of Omaha, Neb., '97
 University of Pennsylvania, '98
 University of Rochester, N. Y., '00
 University of State of N. Y., '93
 University of Tennessee, '01
 University of Texas, '95
 University of Utah, '98
 University of Vermont, '01
 University of Washington, '98
 University of Wyoming, '97
 Updegraff, H., N. Y., '99
 Upton, R. R., Ohio, '98
 Vail, Henry H., N. Y., '97
 Vaile, E. O., Ill., '95
 Valparaiso Coll., Ind., '97
 Van Adestine, Elizabeth, Mich., '01
 Van Aken, Mrs. G., N. Y., '84
 Vance, Sophie, Ohio, '90
 Vance, Wm. McK., Ohio, '00
 Van Cleave, C. L., Ohio, '96
 Van Cleave, Edw. M., Ohio, '97
 Vandyke, J. A., Minn., '96
 Van Liew, Chas. C., Cal., '94
 Van Rensselaer, Martha, N. Y., '94
 Van Sickle, Jas. H., Md., '92
 Van Winkle, J. D., Ark., '00
 Vassar College, N. Y., '98
 Vaughan, Mary E., Ill., '00
 Veatch, Nathan T., Kan., '95
 Veensfield, Mrs. M. L., Mich., '01
 Vert, Edmund J., Minn., '95
 Viebahn, Chas. F., Wis., '84
 Virtue, G. O., Minn., '98
 Vogel, Wm. H., Ohio, '90
 Volland, A. J., Mich., '97
 Voorhes, O. P., Ohio, '00
 Voorhis, Geo. H., N. J., '93
 Vosburgh, J. H., Okla., '01
 Wabash College, Ind., '95
 Wade, Margaret L., N. J., '94
 Wadhams, John A., Ill., '01
 Wagner, Harr. Cal., '99
 Wagner, W. H., Neb., '90
 Waite, Geo. S., Mich., '00
 Wakeman, J. W., N. J., '92
 Waldo, Evelyn A., La., '97
 Walke, Mathilda L., Ohio, '92
 Walker, B. M., Miss., '99
 Walker, E. W., Wis., '97
 Walker, H. A. C., S. C., '00
 Walker, P. R., Ill., '90
 Walker, R. E., Ill., '99
 Walls, Callie K., Ky., '01
 Walrath, M. H., N. Y., '96
 Walsh, Elizabeth B., Ky., '00
 Walsh, J. H., N. Y., '95
 Walter, Mary, Ohio, '98
 Walter, Sarah J., Conn., '98
 Walters, Wm. W., Mo., '01
 Walton, Geo. A., Mass., '92
 *Ward, Edw. G., N. Y., '99
 Ward, F. D., Ohio, '01
 Ward, Henry B., Neb., '97
 Ward Seminary, Tenn., '99
 Wardlaw, P. S. C., '00
 Ware, N. E., Cal., '00
 Warfield, Wm. C., Ohio, '00
 Waring, J. H., N. D. C., '98
 Warner, A. B., Iowa, '94
 Warner, Chas. F., Mass., '99
 Warr, J. W., Ill., '95
 Warriner, E. C., Mich., '99
 Washburn, Kirk N., Mass., '96
 Washburne, Marion F., Ill., '00
 Waterhouse, A. H., Neb., '96
 Waterman, Richard, Ill., '96
 Watson, Edith M., Wis., '97
 Watt, W. E., Ill., '95
 Way, R. B., Mich., '01
 Weaver, E. W., N. Y., '97
 Weaver, John S., Ohio, '99
 Weaver, Sterrie A., Mass., '00
 Webb, Louis K., Cal., '99
 Weber, A. W., Wis., '97
 Weber, H. C., Tenn., '97
 Webster, E. E., Mich., '99
 Webster, Geo. W., Ill., '99
 Webster, R. H., Cal., '99
 Webster, W. F., Minn., '96
 Weeks, C. W., Minn., '95
 Weir, Samuel, N. Y., '01
 Welch, W. W., Mont., '01
 Weld, Frank A., Minn., '95
 Weldon, Edw., Pa., '98
 Welles, Frank E., N. Y., '95
 Wellesley College, Mass., '00
 Welsh, J. E., Pa., '96
 Wentz, Etta L., N. Y., '96
 Wernick, E. V., Wis., '95
 Wertz, Adda P., Ill., '01
 Westcott, F. H., Ill., '97
 West, Geo. A., N. J., '01
 Westcott, Edith, D. C., '98
 Westcott, O. S., Ill., '95
 Western, The Ohio, '99
 Westervelt, Z. F., N. Y., '97
 Westfall, Mary B., Ohio, '97
 West Virginia Univ., '99
 Wheaton St. Nor. Sch., Wash., '00
 Wheaton Coll., Ill., '99
 Wheeler, Henry N., Mass., '92
 Wheeler, Willard J., Ala., '00
 Wheeling Pub. Lib'y, W. Va., '01
 Wheelock, Chas. F., N. Y., '95
 Whipple, H. A., Wis., '97
 Whitcomb, Arthur K., Mass., '92
 White, Adeline R., Mont., '01
 *White, Chas. G., Mich., '95
 White, Chas. L., Me., '91
 White, Daniel A., Ill., '95
 White, Daniel H., Cal., '99
 *White, Emerson E., Ohio, '70

- White, Fred. C., N. Y., '99
 White, H. C., Ga., '96
 White, J. T., Md., '98
 White, J. U., Mo., '87
 White, Wm. M., Ohio, '96
 White, W. S., Mich., '97
 White, W. T., Tenn., '89
 Whiteford, J. A., Mo., '95
 Whitehill, Miss O. P., N. Mex., '99
 Whitfield, H. L., Miss., '90
 Whitford, Wm. C., Wis., '84
 Whitman College, Wash., '01
 Whitney, Allen S., Mich., '94
 Whitney, M. A., Ill., '91
 Whitney, O. C., Wash., '98
 Whitney, S. Emory, Mich., '93
 Whittsett, W. T., N. C., '00
 Whittemore, Henry, Mass., '95
 Whittle, W. R., R. I., '96
 Wiard, Louise A., Ky., '96
 Wicks, Arthur H., Ohio, '00
 Wicks, John F., Ill., '97
 Wicks, Walter J., Wis., '01
 Widner, Esther A., Ohio, '80
 Wiggs, Mrs. W. H., Ga., '00
 Wilber, Flora, Ill., '01
 Wilcox, Albert H., N. Y., '00
 Wilcox, Jessie B., Wash., '99
 Wiley, Wm. H., Ind., '96
 Wilkins, A. H., Tex., '94
 Wilkinson, E. W., Ohio, '00
 Wilkinson, J. N., Kan., '84
 Wilkinson, Warring, Cal., '99
 Willard, F. E., Iowa, '96
 Williams, Anna L., Cal., '99
 Williams Coll. Lib'y, Mass., '97
 Williams, David, Fla., '97
 Williams, Mrs. Delia, Ohio, '70
 Williams, H. B., Ohio, '00
 Williams, J. D., Ill., '96
 Williams, L. W., R. I., '98
 Williams, M. Ida, Cal., '99
 Williams, Philo J., Kan., '86
 Williams, Sherman, N. Y., '98
 Williams, Thyra C., N. J., '97
 Williams, Wm. H., Wis., '97
 Williamson, J. E., Iowa, '95
 Willis, H. B., N. J., '92
 Willis, H. A., Iowa, '84
 Willis, W. S., N. J., '01
 Wilmington Inst. Free Lib'y, Del., '00
 Wilson, C. B., Mass., '96
 Wilson, Eugene A., Mich., '99
 Wilson, Harry G., Ill., '95
 Wilson, H. B., Ind., '00
 Wilson, H. G., Ariz., '01
 Wilson, J. Alfred, N. J., '99
 Wilson, J. Ormond, D. C., '80
 Wilson, J. W., Kan., '01
 Wilson, M. C., Ala., '00
 Wilson, Mrs. L. L. W., Pa., '99
 Wilson, P. J., Mich., '01
 Wilson, V. L., Iowa, '97
 Wilson, W. B., S. C., '90
 Wilson, Wm. E., Wash., '90
 Windate, Ida M., Mass., '96
 Winne, Jas., N. Y., '92
 Winship, Albert E., Mass., '92
 Winston, Geo. T., N. C., '96
 Winters, T. H., Ohio, '97
 Winthrop Nor. Coll., S. C., '01
 Wirt, Wm. A., Ind., '00
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 Wood, Jas. A., N. Mex., '97
 Wood, John A., Ind., '98
 Wood, O. M., P. R., '93
 Woodhull, J. F., N. Y., '99
 Woodley, O. I., N. Y., '96
 Woodmansee, M. A., Ohio, '98
 Woods, Francis M., Ill., '96
 Woodward, C. M., Mo., '87
 Woodward, Eliz. J., Mass., '99
 Woodward, F. C., S. C., '99
 Woodward, J. C., Ga., '97
 Woody, H. C., Ind., '93
 Wooley, L. C., N. J., '93
 Woolsey, F. S., Cal., '01
 Work, H. B., W. Va., '00
 Worley, G. W., Ind., '01
 Wooster, Lizzie E., Kan., '00
 Wreidt, E. A., Mich., '01
 Wright, A. M., N. Y., '93
 Wright, Anna J., Ohio, '94
 Wright, Edmund W., Me., '89
 Wright, G. H. B., Cal., '01
 Wright, G. S., Mich., '01
 Wright, John A., Ohio, '01
 Wright, L. L., Mich., '96
 Wright, O. A., Ohio, '98
 Wright, R. R., Ga., '00
 Wright, Wm. R., Mich., '92
 Wylie, Mrs. M. J. B., N. Y., '91
 Wylie, G. A., Ohio, '01
 Yates, A. A., N. Y., '98
 Yates, Lydia A., N. C., '98
 Yerby, John D., Ala., '95
 Yoder, A. H., Wash., '96
 Yost, E. W., Mich., '01
 Young, Mrs. Agnes B., S. D., '01
 Young, C. N., Wash., '01
 Young, Mrs. Ella F., Ill., '00
 Young, J. B., Iowa, '96
 Young, J. S., Ill., '95
 Young, Nathan B., Fla., '96
 Young, Robert G., Mont., '89
 Zeller, J. W., Ohio, '01
 Zick, Mary, Iowa, '98
 Zillairo, Margaret C., Pa., '96
 Zimmerman, C. F. A., Wis., '95
 Zirkle, H. W., Colo., '98

CLASSIFIED MEMBERSHIP BY STATES
IN THE
NATIONAL EDUCATIONAL ASSOCIATION
FOR THE YEAR 1901—(DETROIT MEETING)

STATE OR TERRITORY	ACTIVE MEMBERSHIP					Associate Membership	Total Membership
	Life Directors	Life Members	Former Active Members	New Active Members	Total Active Membership		
Total.....	32	132	2,018	628	2,810	7,372	10,182
North Atlantic Division.....	11	23	563	103	700	609	1,309
South Atlantic Division.....	3	9	176	27	215	258	473
South Central Division.....	2	5	117	30	163	605	768
North Central Division.....	14	84	912	398	1,408	5,483	6,891
Western Division.....	2	11	229	50	292	394	686
Colonies.....	.....	.....	14	2	16	.....	16
Foreign.....	.....	.....	7	9	16	23	39
North Atlantic Division—							
Maine.....	1	1	7	3	12	1	13
New Hampshire.....	.....	1	2	2	5	2	7
Vermont.....	.....	.....	6	6	12	9	21
Massachusetts.....	1	2	110	20	133	63	196
Rhode Island.....	1	.....	16	3	20	3	23
Connecticut.....	.....	.....	18	6	24	17	41
New York.....	5	12	238	37	292	220	512
New Jersey.....	1	1	66	10	78	95	173
Pennsylvania.....	2	6	100	16	124	199	323
South Atlantic Division—							
Delaware.....	.....	.....	3	3	6	1	7
Maryland.....	.....	1	24	4	29	47	76
District of Columbia.....	2	3	39	4	48	89	137
Virginia.....	.....	.....	15	1	16	6	22
West Virginia.....	1	1	12	7	21	35	56
North Carolina.....	.....	2	19	1	22	7	29
South Carolina.....	.....	1	22	.....	23	7	30
Georgia.....	.....	1	29	3	33	44	77
Florida.....	.....	.....	13	4	17	22	39
South Central Division—							
Kentucky.....	.....	2	19	11	32	183	215
Tennessee.....	2	1	16	4	23	85	108
Alabama.....	.....	.....	20	5	25	10	35
Mississippi.....	.....	.....	10	1	11	9	20
Louisiana.....	.....	.....	12	2	14	32	46
Texas.....	.....	.....	15	4	19	129	148
Arkansas.....	.....	.....	18	8	26	90	116
Oklahoma.....	.....	1	7	2	10	61	71
Indian Territory.....	.....	1	.....	2	3	6	9
North Central Division—							
Ohio.....	2	14	155	83	254	499	753
Indiana.....	.....	2	79	32	113	244	357
Illinois.....	6	7	252	77	342	800	1,142
Michigan.....	2	.....	74	89	165	2,028	2,193
Wisconsin.....	.....	33	79	14	126	167	293
Iowa.....	.....	3	51	25	79	365	444
Minnesota.....	1	2	67	18	88	294	382
Missouri.....	2	2	60	23	87	328	415
North Dakota.....	.....	.....	13	4	17	81	98
South Dakota.....	.....	.....	14	18	32	109	141
Nebraska.....	.....	1	33	9	43	282	325
Kansas.....	1	20	35	6	62	286	348
Western Division—							
Montana.....	.....	.....	15	7	22	66	88
Wyoming.....	.....	.....	6	1	7	8	15
Colorado.....	1	1	43	10	55	63	118
New Mexico.....	.....	.....	12	3	15	16	31
Arizona.....	.....	.....	11	4	15	19	34
Utah.....	.....	.....	6	4	10	22	32
Nevada.....	.....	.....	3	.....	3	3	6
Idaho.....	.....	.....	4	.....	4	10	19
Washington.....	.....	2	10	2	9	54	61
Oregon.....	1	1	8	1	11	34	45
California.....	.....	7	102	9	118	99	217
Colonies—							
Alaska.....	.....	.....	1	.....	1	.....	1
Hawaii.....	.....	.....	4	.....	4	.....	4
Porto Rico.....	.....	.....	3	2	5	.....	5
Philippine Islands.....	.....	.....	6	.....	6	.....	6
Foreign—							
Canada.....	.....	.....	3	2	5	21	26
Other countries.....	.....	.....	4	7	11	2	13

RECORD OF MEMBERSHIP BY STATES IN THE NATIONAL EDUCATIONAL ASSOCIATION

FOR EACH YEAR FROM 1884-1901, INCLUSIVE

Excepting for 1893, when no regular meeting was held. Heavier numbers show members from the state in which the meeting for the year was held.

STATE OR TERRITORY	Madison	Saratoga	Topeka	Chicago	San Francisco	Nashville	St. Paul	Toronto	Saratoga	Asbury Park	Denver	Buffalo	Milwaukee	Washington	Los Angeles	Charleston	Denmo
	1884	1885	1886	1887	1888	1889	1890	1891	1892	1894	1895	1896	1897	1898	1899	1900	1901
Total.....	2,729	625	1,197	9,115	7,216	1,084	5,474	4,778	3,360	5,915	11,297	9,072	7,111	10,533	13,656	4,641	10,122
N. Atlantic Div..	792	406	386	773	803	101	795	426	1,187	1,711	1,462	2,940	942	1,492	1,877	781	1,206
S. Atlantic Div..	77	16	31	44	113	138	95	151	309	271	289	237	172	1,146	361	1,181	475
S. Central Div..	111	19	47	370	216	1,074	261	417	253	460	809	419	304	1,588	818	414	625
N. Central Div..	1,712	176	708	7,071	1,074	642	4,156	2,933	1,456	3,357	7,211	5,083	5,315	5,282	5,074	1,003	6,225
Western Div..	26	7	25	102	4,974	38	122	196	104	73	1,403	377	366	412	5,487	354	586
Colonies.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Foreign.....	11	1	.....	155	36	1	45	655	51	43	33	16	12	13	39	6	26
N. Atlantic Div.	21	2	5	25	11	.....	32	30	10	5	24	7	7	10	16	12	15
Maine.....	21	2	5	25	11	.....	32	30	10	5	24	7	7	10	16	12	15
N. Hampshire	6	10	23	11	.....	32	9	5	7	27	8	6	6	10	14	5	7
Vermont.....	43	8	3	41	4	.....	40	4	20	4	13	14	15	11	11	8	12
Massachusetts	310	145	85	277	206	28	990	114	212	59	191	197	159	159	994	139	206
Rhode Island..	50	13	13	29	30	4	31	42	23	12	55	35	23	36	50	18	25
Connecticut...	40	18	23	36	48	4	31	18	63	13	26	43	24	31	46	24	41
New York.....	143	159	91	211	210	29	228	117	811	326	521	2,132	411	509	756	327	512
New Jersey....	40	27	35	23	41	13	12	16	65	969	168	179	110	172	154	93	172
Pennsylvania..	81	28	121	108	242	23	99	76	178	323	437	325	187	558	536	157	323
S. Atlantic Div.	1	.....	4	.....	3	1	2	5	6	8	17	11	8	9	9	4	7
Delaware.....	1	.....	10	8	17	3	7	13	49	45	53	23	31	80	50	81	7
Maryland.....	30	1	7	12	32	13	21	10	35	24	47	29	57	382	99	57	137
District of Col.	6	4	3	2	18	12	9	8	2	24	36	21	10	63	22	38	22
Virginia.....	15	3	3	8	6	6	27	49	20	37	49	52	16	129	29	18	25
West Virginia.	3	2	.....	2	8	19	9	13	17	15	5	14	4	76	27	72	65
N. Carolina...	5	4	1	2	13	22	4	18	14	59	1	31	7	92	22	691	27
S. Carolina...	11	1	2	10	16	43	23	31	163	64	62	43	30	261	87	145	77
Georgia.....	1	1	1	.....	16	16	7	4	3	2	19	13	9	54	16	71	35
Florida.....	3	1	.....	1	8	6	1	3	4	1	23	14	11	7	11	1	16
S. Central Div.	121	43	67	581	225	60	361	355	178	990	592	565	357	1,313	580	286	551
Kentucky.....	33	2	8	151	22	114	39	57	42	128	176	77	68	408	136	68	215
Tennessee.....	12	6	5	62	83	607	97	124	57	124	66	57	25	248	113	961	106
Alabama.....	9	1	1	16	45	123	35	79	51	41	41	59	25	229	69	74	35
Mississippi....	7	1	2	7	10	87	44	42	36	20	49	25	19	102	61	27	20
Louisiana.....	3	7	8	11	7	19	13	25	21	35	108	25	42	146	60	26	45
Texas.....	22	1	15	55	29	89	20	53	9	82	294	99	41	257	221	551	162
Arkansas.....	22	.....	8	67	12	29	12	34	33	25	84	63	41	132	96	40	117
Oklahoma.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	58	14	11	60	47	21	71
Indian Ty.....	3	1	.....	1	8	6	1	3	4	1	23	.....	2	7	11	1	16
N. Central Div.	121	43	67	581	225	60	361	355	178	990	592	565	357	1,313	580	286	551
Ohio.....	54	15	46	418	71	89	206	149	65	258	321	250	205	591	354	173	557
Indiana.....	354	33	164	1,750	222	204	625	666	214	871	1,495	1,174	785	1,340	1,216	557	1,142
Illinois.....	77	12	20	273	40	29	137	259	285	155	204	589	327	379	106	110	2,160
Michigan.....	540	18	18	486	57	28	443	222	72	143	188	413	1,870	301	287	187	295
Wisconsin.....	304	18	87	1,146	96	67	572	278	110	104	1,086	578	543	383	593	82	444
Iowa.....	132	9	11	649	58	16	933	118	54	86	193	303	333	164	267	121	255
Minnesota.....	46	11	73	625	133	68	249	320	189	435	1,113	406	285	795	673	106	451
Missouri.....	23	1	5	149	8	7	99	32	16	8	28	34	53	26	38	16	24
North Dakota..	.....	.....	.....	.....	.....	.....	109	31	20	9	78	13	118	45	86	30	16
South Dakota..	39	5	27	634	40	10	147	220	126	127	742	363	221	103	331	86	325
Nebraska.....	16	11	180	960	124	64	275	283	127	111	1,171	325	187	382	453	89	246
Western Div.	3	1	1	9	4	5	37	24	9	3	15	43	78	20	70	24	28
Montana.....	1	2	2	8	.....	5	13	4	2	48	7	10	8	13	7	10	15
Wyoming.....	12	2	11	40	109	8	50	114	59	58	1,136	177	145	196	465	65	111
Colorado.....	.....	.....	.....	2	26	2	1	7	5	.....	26	16	21	27	90	18	21
New Mexico....	.....	.....	.....	1	45	1	1	.....	2	2	11	6	6	21	158	19	24
Arizona.....	.....	1	3	4	127	.....	.....	10	8	4	89	37	22	25	106	8	31
Utah.....	.....	.....	1	6	134	.....	1	.....	.....	.....	2	5	3	2	49	3	12
Nevada.....	.....	.....	1	.....	12	.....	.....	.....	1	1	3	10	6	3	32	11	12
Idaho.....	.....	.....	1	3	27	1	6	18	1	2	6	16	8	12	56	20	21
Washington....	3	1	1	11	204	8	7	5	5	.....	14	9	7	10	79	13	45
Oregon.....	5	.....	4	18	4,278	13	8	5	10	1	53	51	56	87	4,351	156	217
California.....	11	1	.....	155	36	1	45	655	51	43	33	16	13	13	39	6	24
Colonies	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Alaska.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	1	1
Hawaii.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	5	4
Porto Rico....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	4	4
Philippine Isls	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	2
Foreign.....	11	1	.....	155	36	1	45	655	51	43	33	16	13	13	39	6	24

INVENTORY AND PRICE LIST OF PUBLICATIONS OF THE NATIONAL EDUCATIONAL ASSOCIATION IN THE DEPOSITORY AT WASHING- TON, D. C., JULY 1, 1901

MISCELLANEOUS PUBLICATIONS

		Number of copies in stock	Prices in sets, carriage not prepaid	Price per single vol- ume, carriage prepaid
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1873	Elmira	230	\$1.25	\$1.50
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1876	Baltimore	261	1.25	1.50
1877	Louisville	160	1.25	1.50
1878	(No meeting)
1879	Philadelphia	273	1.25	1.50
1880	Chautauqua	218	1.25	1.50
1881	Atlanta	477	1.25	1.50
1882	Saratoga Springs	18	1.50	*
1883	Saratoga Springs	*	*	*
1884	Madison	542	1.50	1.75
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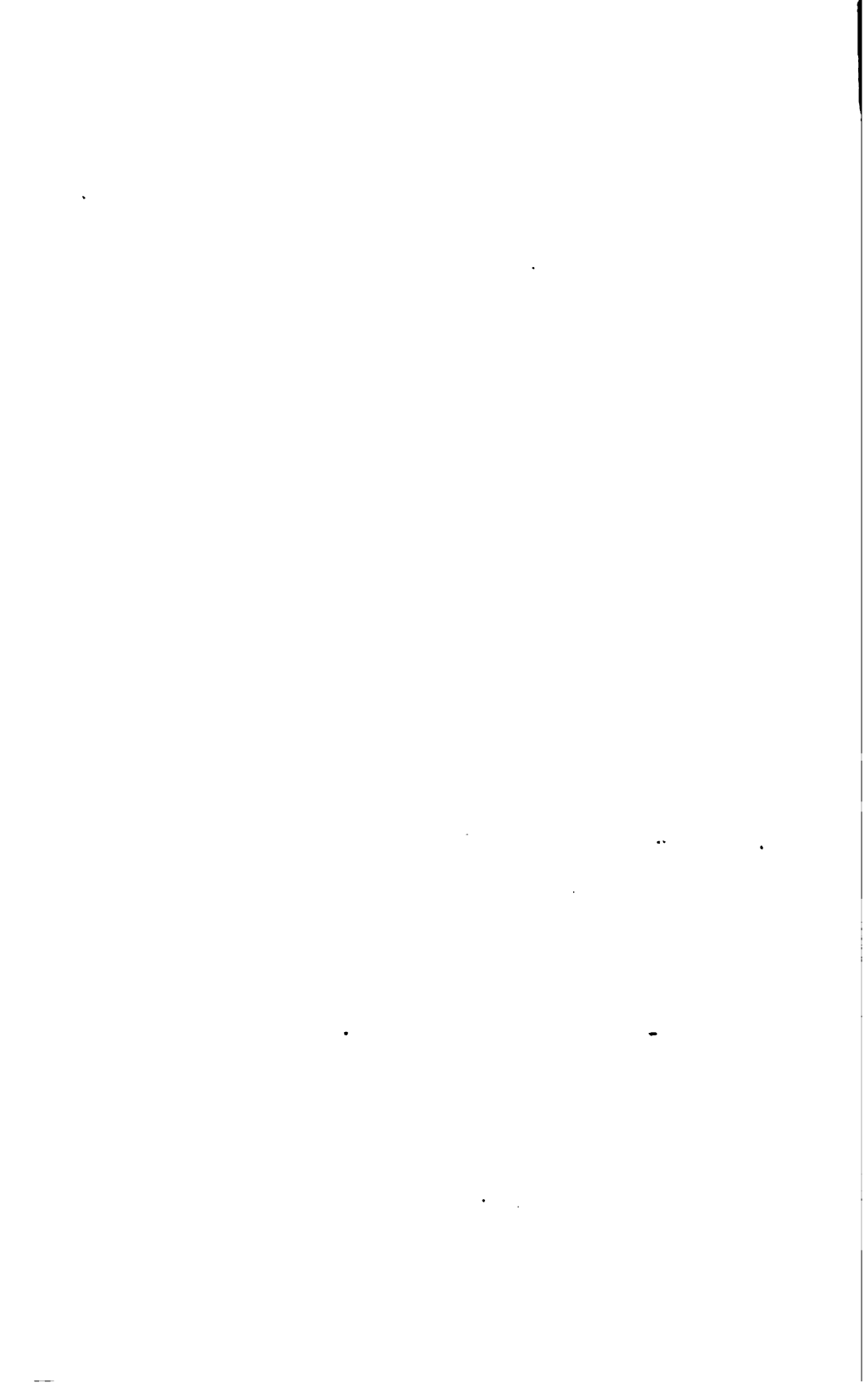
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IRWIN SHEPARD, *Secretary*,
Winona, Minn.



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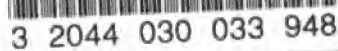
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